



7705 Service Aggregation Router Gen 2

Release 26.10.R1

MD-CLI Command Reference Guide

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1 Getting started

1.1 About this guide

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

See the *7250 IXR, 7450 ESS, 7705 SAR Gen 2, 7750 SR, 7950 XRS, and VSR Acronyms Reference Guide* for expansions of acronyms used in this guide.

For a list of unsupported features by platform and chassis, see the *SR OS R26.x.Rx Software Release Notes*, part number 3HE 29176 000x TQZZA.

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



Note: This guide generically covers Release 26.x.Rx content and may contain some content that will be released in later maintenance loads. See the *SR OS R26.x.Rx Software Release Notes*, part number 3HE 29176 000x TQZZA, for information about features supported in each load of the Release 26.x.Rx software. For a list of features and CLI commands that are present in SR OS but not supported on the 7705 SAR Gen 2 platforms, see "SR OS Features not Supported on SAR Gen 2" in the *SR OS R26.x.Rx Software Release Notes*.

To access the configuration statements within the MD-CLI, the MD-CLI engine must be enabled and the configuration mode must be **mixed** or **model-driven**. For information about using the MD-CLI, see the *7705 SAR Gen 2 MD-CLI User Guide*.

1.2 Platforms and terminology



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

Table 1: Platforms and terminology

Platform	Collective platform designation
7705 SAR-10x	7705 SAR Gen 2
7705 SAR-Hx	
7705 SAR-Mx	
7705 SAR-1	

1.3 Conventions

This section describes the general conventions used in this guide.

1.3.1 Precautionary and information messages

The following information symbols are used in the documentation.



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



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



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



Note: Note provides additional operational information.



Tip: Tip provides suggestions for use or best practices.

1.3.2 Options or substeps in procedures and sequential workflows

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

Example: Options in a procedure

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

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

Example: Substeps in a procedure

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

- b. This is another substep.

Nested substeps within a procedure or a sequential workflow are indicated by roman numerals. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform two substeps (a. and b.) to complete the step. At substep b, the user must perform two additional substeps (i. and ii.) to complete the step.

Example: Nested substeps in a procedure

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

1.4 MD-CLI command reference

1.4.1 MD-CLI tree hierarchy

Table 2: Command syntax symbols

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

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

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

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

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

Figure 1: MD-CLI configuration tree example

```

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

```

sw4113

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

Commands are linked to their command descriptions in the configuration tree with some exceptions (for example, to reduce repeated content), including the **apply-groups**, **apply-groups-exclude**, and **groups** commands. These commands are used to direct the use of configuration templates called configuration groups in the configure region at all configuration levels. The **apply-groups** command applies a configuration group at a configuration level and the **apply-groups-exclude** command excludes a configuration group at a configuration level. See "Using configuration groups" in the *7705 SAR Gen 2 MD-CLI User Guide* for more information.

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

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

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

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

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

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

- number
- IPv4 address
- IPv6 address
- MAC address

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

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

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

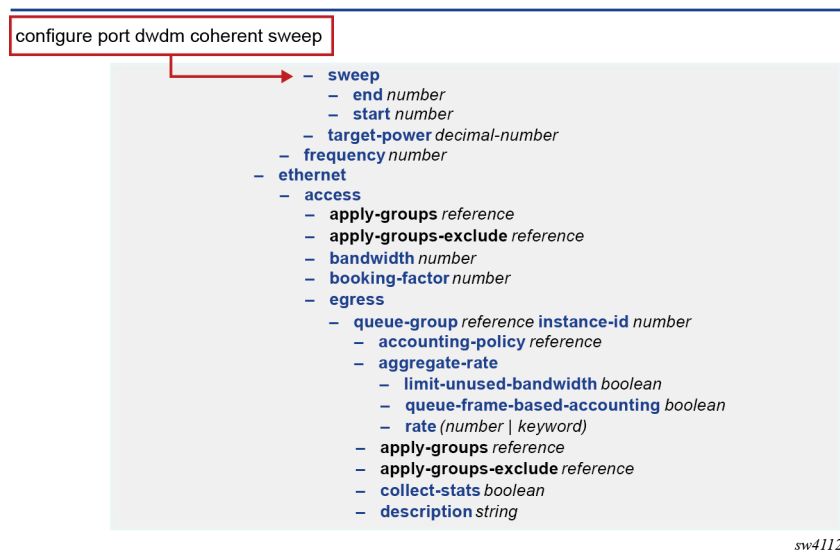
```
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
```

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

1.4.1.1 Context path

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

Figure 2: Command tree navigation



1.4.2 MD-CLI command descriptions

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

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

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

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

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

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

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

Table 3: Command descriptions fields

Field	Description
Element Name	Name of the element (command or parameter) and its syntax
Synopsis	Summary description of the element
Context	Full path to the command (with links to parent commands)
Tree	Link to the command in the CLI tree. For key elements, the link is to the parent element.
Description	Detailed description of the element, as needed
String length	For string elements, the range of the number of characters allowed
String format	For string elements, the format of the characters in the string
Range/Max. range	For number elements, the range of allowed values. A maximum range may be overridden by a platform-specific range.
Units	Base unit type of the element

Field	Description
Options	Enumerated values allowed for the element. Not all options are available on all platforms.
MD-CLI default	MD-CLI default value for the element
Default	YANG default value when there is no MD-CLI default. Platform-specific defaults are not displayed.
Reference	Reference to an element instance in the configuration or state datastore
Min./Max. instances	For lists and leaf-lists, the minimum or maximum number of instances for this element
Notes	Information about special attributes of the element, including whether the element is: <ul style="list-style-type: none"> • a key for an element • mandatory • ordered by the user (instead of by the system) • part of a choice of elements
Introduced	Release in which the element was introduced
Deprecated	Release in which the element was deprecated
Platforms	<p>Hardware platforms on which the element is available. See Platforms and terminology for more information about the platforms.</p> <div>  <p>Note: Some SR OS features are platform-specific and therefore may not be available or visible on all platforms. See the <i>SR OS R26.x.Rx Software Release Notes</i>, part number 3HE 29176 000x TQZZA, for information about platform support.</p> </div>

A description of the element is also available from the online help for the element. For information about using the online help in the MD-CLI, see the *7705 SAR Gen 2 MD-CLI User Guide*.



Note:

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

2 Operational commands

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

2.1 admin commands

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

```
admin
- clear
  - security
    - lockout
      - all
      - user named-item
    - password-history
      - all
      - user named-item
  - disconnect
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - op-table-bypass boolean
    - session-id number
    - session-type keyword
    - username named-item
  - ipsec
    - show
      - key
        - gateway named-item
        - idi display-string
        - ip-tunnel interface-name
        - ipsec-tunnel named-item
        - json
        - peer-tunnel-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - peer-tunnel-port number
        - removed-tunnels boolean
        - type keyword
  - nat
    - save-deterministic-script
  - reboot
    - [card] keyword
    - hold
    - now
  - redundancy
    - force-switchover
      - now
    - synchronize
      - boot-environment
      - certificate
      - configuration
  - save
    - bof
    - cleartext
    - configure
    - debug
    - password string
    - [url] string
  - set
    - time
      - [system-time] date-and-time
  - show
    - configuration
      - bof
      - booted
      - cflash-id cflash-id
      - [cli-path] cli-path-type
```

admin show configuration configure

```

- configure
- debug
- depth number
- detail
- flat
- full-context
- inheritance
- intended
- json
- running
- units
- xml
- support-mode
- disable
- kernel
  - password encrypted-leaf
  - token string
- shell
  - password encrypted-leaf
  - token string
- system
  - license
    - activate
      - [file-url] string
      - now
    - clear
      - now
    - validate
      - [file-url] string
  - management-interface
    - commit
      - confirmed
      - accept
      - cancel
    - commit-management
      - python-scripts
      - disable-next-run
    - operations
      - delete-operation
        - [delete-id] number
        - op-table-bypass boolean
      - stop-operation
        - op-table-bypass boolean
        - [stop-id] number
  - port-speed-mode
    - force
    - [mode] keyword
- security
  - hash-control
    - custom-hash
      - algorithm keyword
      - key string
    - remove-custom-hash
  - os-security
    - activate-password
      - card reference
      - force
      - password string
    - anti-theft
      - activate
        - card reference
        - force
        - password string
      - deactivate

```

admin system security os-security anti-theft deactivate card

```

    - card reference
    - force
    - password string
  - unlock
    - password string
  - remove-password
    - force
    - password string
  - set-password
    - current-password anti-theft-password-cleartext
    - force
    - new-password anti-theft-password-cleartext
- pki
  - clear-ocsp-cache
    - [entry-id] number
  - cmpv2
    - cert-request
      - ca-profile reference
      - current-certificate pki-file-name
      - current-key pki-file-name
      - domain-name string
      - hash-algorithm keyword
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - new-key pki-file-name
      - save-as cflash-url
      - subject-dn string
    - clear-request
      - ca-profile reference
    - initial-registration
      - ca-profile reference
      - certificate pki-file-name
      - domain-name string
      - hash-algorithm keyword
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - key-to-certify pki-file-name
      - password string
      - protection-key pki-file-name
      - reference string
      - save-as cflash-url
      - send-chain
      - subject-dn string
      - with-ca reference
    - key-update
      - ca-profile reference
      - hash-algorithm keyword
      - new-key pki-file-name
      - old-certificate pki-file-name
      - old-key pki-file-name
      - save-as cflash-url
    - poll
      - ca-profile reference
  - convert-file
    - force
    - format keyword
    - [input-file] pki-file-name
    - [output-file] pki-file-name
  - crl-update
    - ca-profile reference
  - est
    - ca-certificates
      - est-profile string
      - force
      - output-url cflash-url
    - enroll

```

admin system security pki est enroll domain-name

- **domain-name** *string*
 - **est-profile** *string*
 - **force**
 - **hash-algorithm** *keyword*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **key** *cflash-url*
 - **output-file** *pki-file-name*
 - **subject-dn** *string*
 - **validate-certificate-chain**
- **renew**
 - **certificate** *cflash-url*
 - **est-profile** *string*
 - **force**
 - **hash-algorithm** *keyword*
 - **key** *cflash-url*
 - **output-file** *pki-file-name*
 - **validate-certificate-chain**
- **export**
 - **format** *keyword*
 - **input-file** *pki-file-name*
 - **key-file** *pki-file-name*
 - **output-url** *cflash-url*
 - **password** *string*
 - **type** *keyword*
- **generate-csr**
 - **domain-name** *string*
 - **hash-algorithm** *keyword*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **key-url** *cflash-url*
 - **output-url** *cflash-url*
 - **subject-dn** *string*
 - **use-printable**
- **generate-keypair**
 - **dsa-key-size** *number*
 - **ecdsa-curve** *keyword*
 - **rsa-key-size** *number*
 - **[save-path]** *cflash-url*
- **import**
 - **format** *keyword*
 - **input-url** *cflash-url*
 - **output-file** *pki-file-name*
 - **password** *string*
 - **type** *keyword*
 - **validate-certificate-chain**
- **reload**
 - **application** *keyword*
 - **certificate** *pki-file-name*
 - **key** *pki-file-name*
- **show**
 - **file-content**
 - **[file-path]** *cflash-url*
 - **format** *keyword*
 - **password** *string*
 - **type** *keyword*
- **update-certificate**
 - **certificate** *reference*
- **secure-boot**
 - **activate**
 - **card** *reference*
 - **confirmation-code** *string-not-all-spaces*
 - **serial-number** *string-not-all-spaces*
 - **revoke-key**
 - **card** *reference*
 - **confirmation-code** *string-not-all-spaces*

admin system security secure-boot revoke-key serial-number

- **serial-number** *string-not-all-spaces*
 - **update-key**
 - **card** *reference*
 - **confirmation-code** *string-not-all-spaces*
 - **serial-number** *string-not-all-spaces*
 - **software-image** *cflash-and-url*
 - **validate**
 - **software-image** *cflash-and-url*
- **storage-encryption**
- **primary-secret**
 - **set-secret**
- **system-password**
- **admin-password**
- **telemetry**
- **grpc**
 - **cancel**
 - **all**
 - **subscription-id** *reference*
- **tech-support**
- **diagnostic**
 - **extensive**
 - **state**
 - **[url]** *url*

2.1.1 admin command descriptions

admin

Synopsis	Enter the administrative context for system operations
Context	admin
Tree	admin
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear

Synopsis	Enter the clear context
Context	admin clear
Tree	clear
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security

Synopsis	Enter the security context
Context	admin clear security
Tree	security
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lockout

Synopsis	Reset the lockout timer
Context	admin clear security lockout
Tree	lockout
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Clear lockout of all users
Context	admin clear security lockout all
Tree	all
Notes	The following elements are part of a mandatory choice: all or user .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user *named-item*

Synopsis	User to be cleared of lockout
Context	admin clear security lockout user <i>named-item</i>
Tree	user
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: all or user .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password-history

Synopsis	Clear the password history
Context	admin clear security password-history
Tree	password-history
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Clear password history of all users
Context	admin clear security password-history all
Tree	all
Notes	The following elements are part of a mandatory choice: all or user .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

user *named-item*

Synopsis User to be cleared of password history information

Context [admin clear security password-history user](#) *named-item*

Tree [user](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes The following elements are part of a mandatory choice: **all** or **user**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

disconnect

Synopsis Disconnect a user session

Context [admin disconnect](#)

Tree [disconnect](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis IP address of the session to disconnect

Context [admin disconnect address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

op-table-bypass *boolean*

Synopsis Avoid operation ID allocation

Context [admin disconnect op-table-bypass](#) *boolean*

Tree [op-table-bypass](#)

Description	When configured to true , the system bypasses the YANG-based operations infrastructure and avoids the allocation of an operation ID. This is useful if the global operations table is full and a delete operation or admin disconnect is required.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-id *number*

Synopsis	ID of the session to disconnect
Context	admin disconnect session-id <i>number</i>
Tree	session-id
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-type *keyword*

Synopsis	Type of session to disconnect
Context	admin disconnect session-type <i>keyword</i>
Tree	session-type
Options	console, telnet, ssh, ftp, netconf, grpc, cron-ehs
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

username *named-item*

Synopsis	Username to disconnect
Context	admin disconnect username <i>named-item</i>
Tree	username
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec

Synopsis	Enter the ipsec context
Context	admin ipsec
Tree	ipsec
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	admin ipsec show
Tree	show
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key

Synopsis	Display IPsec key history
Context	admin ipsec show key
Tree	key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gateway *named-item*

Synopsis	IPsec gateway name
Context	admin ipsec show key gateway <i>named-item</i>
Tree	gateway
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

idi *display-string*

Synopsis	Regular expression string to match IDi of saved records
Context	admin ipsec show key idi <i>display-string</i>
Tree	idi
String length	1 to 255
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-tunnel *interface-name*

Synopsis	IPsec transport mode IP tunnel name
Context	admin ipsec show key ip-tunnel <i>interface-name</i>
Tree	ip-tunnel
String length	1 to 32
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec-tunnel *named-item*

Synopsis	IPsec tunnel name
Context	admin ipsec show key ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

json

Synopsis	Show the output in indented JSON format
Context	admin ipsec show key json
Tree	json
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Dynamic tunnel IP address
Context	admin ipsec show key peer-tunnel-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-tunnel-ip-address
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-tunnel-port *number*

Synopsis	Dynamic tunnel port
Context	admin ipsec show key peer-tunnel-port <i>number</i>
Tree	peer-tunnel-port
Range	0 1 to 65535
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

removed-tunnels *boolean*

Synopsis	Show the keys of removed dynamic tunnels
Context	admin ipsec show key removed-tunnels <i>boolean</i>
Tree	removed-tunnels
Description	When configured to true, the system displays IKE keys of removed dynamic tunnels.

Default	false
Notes	The following elements are part of a mandatory choice: (gateway , idi , peer-tunnel-ip-address , peer-tunnel-port , and removed-tunnels), ip-tunnel , or ipsec-tunnel .
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

type *keyword*

Synopsis	Key type
Context	admin ipsec show key type <i>keyword</i>
Tree	type
Options	ike, child
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat

Synopsis	Enter the nat context
Context	admin nat
Tree	nat
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

save-deterministic-script

Synopsis	Save script that computes deterministic NAT map entries
Context	admin nat save-deterministic-script
Tree	save-deterministic-script
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reboot

Synopsis	Reboot CPM or force an upgrade of system boot ROMs
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Context	admin reboot
Tree	reboot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[card] *keyword*

Synopsis	Card to reboot
Context	admin reboot [card] <i>keyword</i>
Tree	[card]
Options	active, standby, upgrade
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold

Synopsis	Hold a rebooted standby CPM from coming back online
Context	admin reboot hold
Tree	hold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

now

Synopsis	Reboot immediately without prompts or confirmation
Context	admin reboot now
Tree	now
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redundancy

Synopsis	Enter the redundancy context
Context	admin redundancy
Tree	redundancy

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-switchover

Synopsis	Force a switchover to the standby CPM or CPIOM
Context	admin redundancy force-switchover
Tree	force-switchover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

now

Synopsis	Force the switchover to the standby CPM immediately
Context	admin redundancy force-switchover now
Tree	now
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

synchronize

Synopsis	Synchronize the standby CPM or CPIOM
Context	admin redundancy synchronize
Tree	synchronize
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-environment

Synopsis	Synchronize all files required for the boot process
Context	admin redundancy synchronize boot-environment
Tree	boot-environment
Notes	The following elements are part of a mandatory choice: boot-environment , certificate , or configuration .
Introduced	25.3.R2

Platforms	7705 SAR Gen 2
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certificate

Synopsis	Synchronize the PKI certificate files
Context	admin redundancy synchronize certificate
Tree	certificate
Notes	The following elements are part of a mandatory choice: boot-environment , certificate , or configuration .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configuration

Synopsis	Synchronize the configuration files
Context	admin redundancy synchronize configuration
Tree	configuration
Description	When specified, the system synchronizes the primary, secondary, and tertiary configuration files.
Notes	The following elements are part of a mandatory choice: boot-environment , certificate , or configuration .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

save

Synopsis	Perform configuration save operations
Context	admin save
Tree	save
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bof

Synopsis	Save the BOF region configuration
Context	admin save bof

Tree	bof
Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cleartext

Synopsis	Force the configuration to save in cleartext
Context	admin save cleartext
Tree	cleartext
Description	When configured, the system saves the configuration in cleartext format. The system prompts the user to enter the OS security password or the BOF encryption key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configure

Synopsis	Save the configure region configuration
Context	admin save configure
Tree	configure
Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug

Synopsis	Save the debug region configuration
Context	admin save debug
Tree	debug
Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	Password to force the configuration save in cleartext
Context	admin save password <i>string</i>
Tree	password
String length	8 to 32
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[url] *string*

Synopsis	Location to save the configuration
Context	admin save [url] <i>string</i>
Tree	[url]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set

Synopsis	Enter the set context
Context	admin set
Tree	set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time

Synopsis	System date and time
Context	admin set time
Tree	time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[system-time] *date-and-time*

Synopsis	System date and time
Context	admin set time [system-time] <i>date-and-time</i>
Tree	[system-time]
Description	This command sets the system date and time. The time zone may optionally be specified. When the time zone is not specified, the system uses the configured system time zone.
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	admin show
Tree	show
Description	The admin show commands display the same configuration as the info command but are not subject to command authorization and do not require configuration mode access.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configuration

Synopsis	Show the current configuration
Context	admin show configuration
Tree	configuration
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bof

Synopsis	Show the BOF region configuration
Context	admin show configuration bof
Tree	bof

Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

booted

Synopsis	Show the booted BOF configuration
Context	admin show configuration booted
Tree	booted
Notes	The following elements are part of a choice: booted or cflash-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cflash-id *cflash-id*

Synopsis	Show the BOF configuration file on a compact flash
Context	admin show configuration cflash-id cflash-id
Tree	cflash-id
String length	4 to 6
String format	'cflash-id' must be cf1-4: or cf1-4-A-D: (e.g. cf1: or cf2-B:)
Notes	The following elements are part of a choice: booted or cflash-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] *cli-path-type*

Synopsis	Absolute path or relative path from '/'
Context	admin show configuration [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configure

Synopsis	Show the configure region configuration
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Context	admin show configuration configure
Tree	configure
Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug

Synopsis	Show the debug region configuration
Context	admin show configuration debug
Tree	debug
Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

depth *number*

Synopsis	Depth limit from the pwc
Context	admin show configuration depth <i>number</i>
Tree	depth
Range	1 to 4294967040
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail

Synopsis	Include default and unconfigured values
Context	admin show configuration detail
Tree	detail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flat

Synopsis	Show the context from the pwc on each line
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Context	admin show configuration flat
Tree	flat
Notes	The following elements are part of a choice: flat , full-context , json , or xml .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

full-context

Synopsis	Show the full context on each line
Context	admin show configuration full-context
Tree	full-context
Notes	The following elements are part of a choice: flat , full-context , json , or xml .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inheritance

Synopsis	Include configuration inherited from configuration groups
Context	admin show configuration inheritance
Tree	inheritance
Description	<p>This option specifies the inclusion of configuration inherited from configuration groups in the output.</p> <p>This option should only be used in the configure region when configuration groups are used. The output with this option is the same as admin show configuration when used in other configuration regions.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

intended

Synopsis	Show the intended configuration
Context	admin show configuration intended
Tree	intended
Notes	The following elements are part of a choice: intended or running .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

json

Synopsis Show the output in indented JSON format

Context [admin show configuration json](#)

Tree [json](#)

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

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

running

Synopsis Show the running configuration

Context [admin show configuration running](#)

Tree [running](#)

Notes The following elements are part of a choice: **intended** or **running**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

units

Synopsis Include unit types for applicable elements

Context [admin show configuration units](#)

Tree [units](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

xml

Synopsis Show the output in indented XML format

Context [admin show configuration xml](#)

Tree [xml](#)

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

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

support-mode

Synopsis Enable technical support commands

Context [admin support-mode](#)

Tree [support-mode](#)

Description Commands in this context enable the **kernel**, **shell**, and **vmhost** commands used only by Nokia technical support for troubleshooting.

Introduced 25.3.R4

Platforms 7705 SAR Gen 2

disable

Synopsis Disable technical support commands

Context [admin support-mode disable](#)

Tree [disable](#)

Description This command disables the **kernel**, **shell**, and **vmhost** commands used only by Nokia technical support for troubleshooting.

Notes The following elements are part of a choice: **disable**, **kernel**, or **shell**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

kernel

Synopsis Enter the **kernel** context

Context [admin support-mode kernel](#)

Tree [kernel](#)

Description This command allows Nokia technical support to access the **kernel** and **vmhost** commands. These commands are used only by Nokia technical support for troubleshooting.

Notes The following elements are part of a choice: **disable**, **kernel**, or **shell**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

password *encrypted-leaf*

Synopsis	Kernel command password
Context	admin support-mode kernel password encrypted-leaf
Tree	password
Description	<p>This command specifies the password to access kernel and vmhost commands. These commands are used only by Nokia technical support for troubleshooting.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

token *string*

Synopsis	Kernel command token
Context	admin support-mode kernel token string
Tree	token
Description	<p>This command specifies the token to access kernel and vmhost commands. These commands are used only by Nokia technical support for troubleshooting.</p>
String length	1 to 1024
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

shell

Synopsis	Enter the shell context
Context	admin support-mode shell
Tree	shell
Description	<p>This command allows Nokia technical support to access the shell commands. shell commands are used only by Nokia technical support for troubleshooting.</p>
Notes	The following elements are part of a choice: disable , kernel , or shell .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *encrypted-leaf*

Synopsis	Shell command password
Context	admin support-mode shell password <i>encrypted-leaf</i>
Tree	password
Description	<p>This command specifies the password to access the shell commands. This command is used only by Nokia technical support for troubleshooting.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

token *string*

Synopsis	Shell command token
Context	admin support-mode shell token <i>string</i>
Tree	token
Description	<p>This command specifies the token to access the shell command. This command is used only by Nokia technical support for troubleshooting.</p>
String length	1 to 1024
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
Context	admin system
Tree	system
Introduced	25.3.R6
Platforms	7705 SAR Gen 2

license

Synopsis	Enter the license context
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Context	admin system license
Tree	license
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activate

Synopsis	Load and activate a system license
Context	admin system license activate
Tree	activate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[file-url] *string*

Synopsis	Location of the license file to activate
Context	admin system license activate [file-url] string
Tree	[file-url]
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

now

Synopsis	Activate the license immediately
Context	admin system license activate now
Tree	now
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear

Synopsis	Clear system license
Context	admin system license clear
Tree	clear

Description	This command removes the entitlements that were installed using a license file. All the entitlements must be unallocated; otherwise, the command fails.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

now

Synopsis	Clear license entitlements immediately
Context	admin system license clear now
Tree	now
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate

Synopsis	Load and validate a system license
Context	admin system license validate
Tree	validate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[file-url] *string*

Synopsis	Location of the license file to validate
Context	admin system license validate [file-url] string
Tree	[file-url]
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-interface

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

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commit

Synopsis	Enter the commit context
Context	admin system management-interface commit
Tree	commit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirmed

Synopsis	Enter the confirmed context
Context	admin system management-interface commit confirmed
Tree	confirmed
Description	Commands in this context accept or cancel a confirmed commit that is in progress and that was started by another configuration session.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept

Synopsis	Accept commit confirmed and cancel automatic rollback
Context	admin system management-interface commit confirmed accept
Tree	accept
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cancel

Synopsis	Cancel commit confirmed and roll back changes
Context	admin system management-interface commit confirmed cancel
Tree	cancel
Description	When specified, the router rolls back the configuration and returns the changes to the candidate.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commit-management

Synopsis	Enter the commit-management context
Context	admin system management-interface commit-management
Tree	commit-management
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

python-scripts

Synopsis	Enter the python-scripts context
Context	admin system management-interface commit-management python-scripts
Tree	python-scripts
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

disable-next-run

Synopsis	Disable commit Python scripts for next commit
Context	admin system management-interface commit-management python-scripts disable-next-run
Tree	disable-next-run
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

operations

Synopsis	Enter the operations context
Context	admin system management-interface operations
Tree	operations
Description	Commands in this context are used to manage YANG-based operations (for example, admin reboot , or ping) in model-driven interfaces.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

delete-operation

Synopsis Stop and remove an operation

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

Tree [delete-operation](#)

Description This command removes an operation and all status and data associated with it. If the operation was executing, it is stopped before removal.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[delete-id] *number*

Synopsis ID of the operation to remove

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

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

Range 1 to 10000

Notes This element is mandatory.

Introduced 25.3.R1

Platforms 7705 SAR Gen 2

op-table-bypass *boolean*

Synopsis Avoid operation ID allocation

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

Tree [op-table-bypass](#)

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

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

stop-operation

Synopsis	Stop the execution of an operational command
Context	admin system management-interface operations stop-operation
Tree	stop-operation
Description	<p>This command stops the execution of an operational command.</p> <p>An operation launched as "asynchronous" is not deleted from the system when it is stopped. Status and other data associated with the operation persist until the operation is explicitly deleted using the delete operation command or a retention timeout.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

op-table-bypass *boolean*

Synopsis	Avoid operation ID allocation
Context	admin system management-interface operations stop-operation op-table-bypass <i>boolean</i>
Tree	op-table-bypass
Description	<p>When configured to true, the system bypasses the YANG-based operations infrastructure and avoids the allocation of an operation ID. This is useful if the global operations table is full and a delete operation or admin disconnect is required.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[stop-id] *number*

Synopsis	ID of the operation to stop
Context	admin system management-interface operations stop-operation [stop-id] <i>number</i>
Tree	[stop-id]
Range	1 to 10000
Notes	This element is mandatory.
Introduced	25.3.R1
Platforms	7705 SAR Gen 2

port-speed-mode

Synopsis	Set the port speed mode for the system
Context	admin system port-speed-mode
Tree	port-speed-mode
Description	When configured, the router allows the specified combination of Ethernet port speeds to be configured on SFP ports.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

force

Synopsis	Proceed without further prompting from the system
Context	admin system port-speed-mode force
Tree	force
Description	When configured, this command ignores additional prompts from the system. This command is required for non-interactive interfaces.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[mode] keyword

Synopsis	Port speed combination allowed on the router
Context	admin system port-speed-mode [mode] keyword
Tree	[mode]
Options	c5-c12-1g/10g, c5-c10-10g+c11-c12-10g/25g, 1g/10g, 10g/25g+1g
Notes	This element is mandatory.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

security

Synopsis	Enter the security context
Context	admin system security
Tree	security

Introduced	25.3.R6
Platforms	7705 SAR Gen 2

hash-control

Synopsis	Enter the hash-control context
Context	admin system security hash-control
Tree	hash-control
Introduced	25.3.R6
Platforms	7705 SAR Gen 2

custom-hash

Synopsis	Custom encryption
Context	admin system security hash-control custom-hash
Tree	custom-hash
Introduced	25.3.R6
Platforms	7705 SAR Gen 2

algorithm *keyword*

Synopsis	Algorithm for custom encryption
Context	admin system security hash-control custom-hash algorithm <i>keyword</i>
Tree	algorithm
Description	This command configures the algorithm for custom encryption. The encryption uses ECB mode, PKCS#7 padding, and Base64 encoding.
Options	3des – DES-EDE3-ECB with PKCS #5 padding aes128 – AES-128-ECB with PKCS #7 padding aes192 – AES-192-ECB with PKCS #7 padding aes256 – AES-256-ECB with PKCS #7 padding
Notes	This element is mandatory.
Introduced	25.3.R6
Platforms	7705 SAR Gen 2

key string

Synopsis	Key for encryption algorithm
Context	admin system security hash-control custom-hash key string
Tree	key
String length	1 to 126
Notes	This element is mandatory.
Introduced	25.3.R6
Platforms	7705 SAR Gen 2

remove-custom-hash

Synopsis	Remove the custom encryption
Context	admin system security hash-control remove-custom-hash
Tree	remove-custom-hash
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

os-security

Synopsis	Enter the os-security context
Context	admin system security os-security
Tree	os-security
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activate-password

Synopsis	Activate the new password used to protect the system
Context	admin system security os-security activate-password
Tree	activate-password
Description	When configured, the system activates the new password, then reboots the system to encrypt the BOF or configuration using the new password. Anti-theft does not need to be deactivated to change the OS security password using this command.
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

card *reference*

Synopsis CPM slot to apply anti-theft settings

Context [admin system security os-security activate-password card](#) *reference*

Tree [card](#)

Reference **state cpm** *cpm-card-slot*

Notes This element is mandatory.

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

force

Synopsis Proceed without further prompting from the system

Context [admin system security os-security activate-password force](#)

Tree [force](#)

Description When configured, this command ignores further prompts from the system. This command is required for non-interactive interfaces.

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

password *string*

Synopsis Preconfigured anti-theft password

Context [admin system security os-security activate-password password](#) *string*

Tree [password](#)

Description This command specifies the preconfigured anti-theft password. This command is required for non-interactive interfaces.

String length 12 to 32

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

anti-theft

Synopsis	Enter the anti-theft context
Context	admin system security os-security anti-theft
Tree	anti-theft
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activate

Synopsis	Enable anti-theft for the specified CPM card
Context	admin system security os-security anti-theft activate
Tree	activate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card reference

Synopsis	CPM slot to apply anti-theft settings
Context	admin system security os-security anti-theft activate card reference
Tree	card
Reference	state cpm cpm-card-slot
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Proceed without further prompting from the system
Context	admin system security os-security anti-theft activate force
Tree	force
Description	When configured, this command ignores further prompts from the system. This command is required for non-interactive interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	Preconfigured anti-theft password
Context	admin system security os-security anti-theft activate password <i>string</i>
Tree	password
Description	This command specifies the preconfigured anti-theft password. This command is required for non-interactive interfaces.
String length	12 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

deactivate

Synopsis	Disables anti-theft for the specified CPM card
Context	admin system security os-security anti-theft deactivate
Tree	deactivate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card *reference*

Synopsis	CPM slot to apply anti-theft settings
Context	admin system security os-security anti-theft deactivate card <i>reference</i>
Tree	card
Reference	state cpm <i>cpm-card-slot</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Proceed without further prompting from the system
Context	admin system security os-security anti-theft deactivate force
Tree	force

Description	When configured, this command ignores further prompts from the system. This command is required for non-interactive interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	Preconfigured anti-theft password
Context	admin system security os-security anti-theft deactivate password <i>string</i>
Tree	password
Description	This command specifies the preconfigured anti-theft password. This command is required for non-interactive interfaces.
String length	12 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unlock

Synopsis	Disable anti-theft locking for the CPM
Context	admin system security os-security anti-theft unlock
Tree	unlock
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	Preconfigured anti-theft password
Context	admin system security os-security anti-theft unlock password <i>string</i>
Tree	password
Description	This command specifies the preconfigured anti-theft password. This command is required for non-interactive interfaces.
String length	12 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-password

Synopsis	Remove the OS security password
Context	admin system security os-security remove-password
Tree	remove-password
Description	When configured, this command removes the OS security password. Any applications using the password must first be disabled before removing the password. Anti-theft must be deactivated to remove the OS security password.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Proceed without further prompting from the system
Context	admin system security os-security remove-password force
Tree	force
Description	When configured, this command ignores further prompts from the system. This command is required for non-interactive interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	Preconfigured anti-theft password
Context	admin system security os-security remove-password password <i>string</i>
Tree	password
Description	This command specifies the preconfigured anti-theft password. This command is required for non-interactive interfaces.
String length	12 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set-password

Synopsis	Configure the password used to protect the system
Context	admin system security os-security set-password

Tree	set-password
Description	When configured, if there was no password previously configured, a new password must be configured using the new-password command. If a password has already been configured, the user must enter the current-password .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

current-password *anti-theft-password-cleartext*

Synopsis	Existing OS security password
Context	admin system security os-security set-password current-password anti-theft-password-cleartext
Tree	current-password
String length	12 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Proceed without further prompting from the system
Context	admin system security os-security set-password force
Tree	force
Description	When configured, this command ignores the requirement to enter the new-password twice. Configuring this command is required for non-interactive interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

new-password *anti-theft-password-cleartext*

Synopsis	New OS security password
Context	admin system security os-security set-password new-password anti-theft-password-cleartext
Tree	new-password
Description	This command configures the new OS security password. When configured, the user is prompted to reenter the new password.
String length	12 to 32
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pki

Synopsis Enter the **pki** context

Context [admin system security pki](#)

Tree [pki](#)

Description Commands in this context specify options for public key infrastructure operations.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

clear-ocsp-cache

Synopsis Clear the current OCSP response cache

Context [admin system security pki clear-ocsp-cache](#)

Tree [clear-ocsp-cache](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[entry-id] number

Synopsis Local OCSP response cache entry ID to clear

Context [admin system security pki clear-ocsp-cache \[entry-id\] number](#)

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

Range 1 to 2000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cmpv2

Synopsis Enter the **cmpv2** context

Context [admin system security pki cmpv2](#)

Tree [cmpv2](#)

Description Commands in this context specify options for Certificate Management Protocol v2 (CMPv2) operations.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-request

Synopsis	Request an additional certificate
Context	admin system security pki cmpv2 cert-request
Tree	cert-request
Description	<p>When specified, the system requests an additional certificate after the initial certificate has been obtained from the CA.</p> <p>The request is authenticated by a signature signed by the current key, along with the current certificate.</p> <p>CA may not return a certificate immediately, for example, if the request process requires manual intervention. The poll command can be used to poll the status of the request.</p> <p>The hash algorithm used for the signature depends on the key type:</p> <ul style="list-style-type: none"> • DSA key - SHA1 • RSA key: MD5 SHA1 SHA224 SHA256 SHA384 SHA512 (default is SHA1) • ECDSA key: SHA1 SHA224 SHA256 SHA384 SHA512 (default is SHA256)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki cmpv2 cert-request ca-profile <i>reference</i>
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	state system security pki ca-profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

current-certificate *pki-file-name*

Synopsis	Existing imported certificate file to create request
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Context	<code>admin system security pki cmpv2 cert-request current-certificate</code> <i>pki-file-name</i>
Tree	<code>current-certificate</code>
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

current-key *pki-file-name*

Synopsis	Imported key file used to create the request
Context	<code>admin system security pki cmpv2 cert-request current-key</code> <i>pki-file-name</i>
Tree	<code>current-key</code>
Description	This command specifies the imported key file corresponding to the existing imported certificate file used to create the request.
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-name *string*

Synopsis	FQDNs for the Subject Alternative Name
Context	<code>admin system security pki cmpv2 cert-request domain-name</code> <i>string</i>
Tree	<code>domain-name</code>
Description	This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.
String length	1 to 512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki cmpv2 cert-request hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki cmpv2 cert-request ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

new-key *pki-file-name*

Synopsis	New imported key file to create certificate request
Context	admin system security pki cmpv2 cert-request new-key <i>pki-file-name</i>
Tree	new-key
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

save-as *cflash-url*

Synopsis	Full path to save the result certificate
Context	admin system security pki cmpv2 cert-request save-as <i>cflash-url</i>

Tree	save-as
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject-dn *string*

Synopsis	Subject of the requesting certificate
Context	admin system security pki cmpv2 cert-request subject-dn <i>string</i>
Tree	subject-dn
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C ST O OU CN}.
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-request

Synopsis	Clear pending CMPv2 requests
Context	admin system security pki cmpv2 clear-request
Tree	clear-request
Description	When specified, the system clears pending CMPv2 requests for the specified CA. If no requests are pending, the system clears the saved result of the previous request
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki cmpv2 clear-request ca-profile <i>reference</i>
Tree	ca-profile

Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	state system security pki ca-profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-registration

Synopsis	Request initial certificate using the CMPv2 protocol
Context	admin system security pki cmpv2 initial-registration
Tree	initial-registration
Description	<p>When specified, the system requests the initial certificate from the CA using the CMPv2 initial registration procedure.</p> <p>The request is authenticated via one of the following methods:</p> <ul style="list-style-type: none"> • A password and a reference number that was pre-distributed by CA via out-of-band means. The specified password and reference number are not necessarily in the key list configured in the corresponding CA profile. If the key list is not configured in the corresponding CA profile, the system uses the existing password to authenticate the CMPv2 packets from the server if it is password protected. If the key list is configured in the corresponding CA profile and the server does not send SenderKID, the system uses the lexicographical first key in the key list to authenticate the CMPv2 packets from the server in case it is password protected. • A signature signed by the protection-key or key-to-certify, optionally with the corresponding certificate. If the protection-key command is not specified, the system uses the key-to-certify configuration for message protection. The hash algorithm used for the signature depends on the key type. Optionally, the system may send a certificate or a chain of certificates in the extraCertsfield. The certificate is specified by the certificate command and must include the public key of the key used for message protection. Sending a chain is enabled by specifying the send-chain and with-ca commands. <p>The CA may not return the certificate immediately, for example, if the request process requires manual intervention. In such cases, the poll command can be used to poll the status of the request.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile reference

Synopsis	PKI CA profile name
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Context	admin system security pki cmpv2 initial-registration ca-profile <i>reference</i>
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	state system security pki ca-profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate *pki-file-name*

Synopsis	Filename of the certificate for the protection key
Context	admin system security pki cmpv2 initial-registration certificate <i>pki-file-name</i>
Tree	certificate
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-name *string*

Synopsis	FQDNs for the Subject Alternative Name
Context	admin system security pki cmpv2 initial-registration domain-name <i>string</i>
Tree	domain-name
Description	This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.
String length	1 to 512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
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Context	admin system security pki cmpv2 initial-registration hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki cmpv2 initial-registration ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-to-certify *pki-file-name*

Synopsis	Name of the key file used to create initial request
Context	admin system security pki cmpv2 initial-registration key-to-certify <i>pki-file-name</i>
Tree	key-to-certify
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	Password for message protection
Context	admin system security pki cmpv2 initial-registration password <i>string</i>
Tree	password

String length	1 to 64
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protection-key *pki-file-name*

Synopsis	Key file used to generate message protection signature
Context	admin system security pki cmpv2 initial-registration protection-key <i>pki-file-name</i>
Tree	protection-key
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference *string*

Synopsis	Password reference number
Context	admin system security pki cmpv2 initial-registration reference <i>string</i>
Tree	reference
String length	1 to 64
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

save-as *cflash-url*

Synopsis	Full path to save the result certificate
Context	admin system security pki cmpv2 initial-registration save-as <i>cflash-url</i>
Tree	save-as
String length	1 to 200

String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-chain

Synopsis	Send a certificate chain
Context	admin system security pki cmpv2 initial-registration send-chain
Tree	send-chain
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject-dn *string*

Synopsis	Subject of the requesting certificate
Context	admin system security pki cmpv2 initial-registration subject-dn <i>string</i>
Tree	subject-dn
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C ST O OU CN}.
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

with-ca *reference*

Synopsis	Name of CA profile with certificate in the send chain
Context	admin system security pki cmpv2 initial-registration with-ca <i>reference</i>
Tree	with-ca
Reference	state system security pki ca-profile <i>named-item</i>

Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-update

Synopsis	Request new certificate to update existing certificate
Context	admin system security pki cmpv2 key-update
Tree	key-update
Description	<p>When specified, the system requests a new certificate from the CA to update an existing certificate due to reasons such as a key refresh or to replace a compromised key.</p> <p>The CA may not return the certificate immediately, for example, if the request process requires manual intervention. In these cases, the poll command can be used to poll the status of the request.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki cmpv2 key-update ca-profile <i>reference</i>
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	state system security pki ca-profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

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

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

new-key *pki-file-name*

Synopsis Name of new imported key file used for the key update
Context [admin system security pki cmpv2 key-update new-key](#) *pki-file-name*
Tree [new-key](#)
String length 1 to 95
String format 'pki-file-name' must not be all spaces
'pki-file-name' must not contain : or / (filename only)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

old-certificate *pki-file-name*

Synopsis Name of the old certificate file to be replaced
Context [admin system security pki cmpv2 key-update old-certificate](#) *pki-file-name*
Tree [old-certificate](#)
String length 1 to 95
String format 'pki-file-name' must not be all spaces
'pki-file-name' must not contain : or / (filename only)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

old-key *pki-file-name*

Synopsis Name of the old key file to be replaced
Context [admin system security pki cmpv2 key-update old-key](#) *pki-file-name*
Tree [old-key](#)
String length 1 to 95
String format 'pki-file-name' must not be all spaces
'pki-file-name' must not contain : or / (filename only)
Notes This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

save-as *cflash-url*

Synopsis	Full path to save the result certificate file
Context	admin system security pki cmpv2 key-update save-as cflash-url
Tree	save-as
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poll

Synopsis	Poll the CMPv2 server for pending request status
Context	admin system security pki cmpv2 poll
Tree	poll
Description	When specified, the system polls the status of the pending CMPv2 request toward the specified CA. If the response is ready, the system resumes the CMPv2 protocol exchange with the server. SR OS allows only one pending CMP request per CA; therefore, no new request is allowed when a pending request is present.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile *reference*

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

Reference	state system security pki ca-profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

convert-file

Synopsis	Convert imported file between secure and legacy format
Context	admin system security pki convert-file
Tree	convert-file
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Force the conversion
Context	admin system security pki convert-file force
Tree	force
Description	When specified, the system forces the conversion of imported certificates and keys even if files with the same output names exist.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format *keyword*

Synopsis	File format to convert to
Context	admin system security pki convert-file format <i>keyword</i>
Tree	format
Options	secure, legacy
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[input-file] *pki-file-name*

Synopsis	Name of the file to be converted
Context	admin system security pki convert-file [input-file] <i>pki-file-name</i>
Tree	[input-file]
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[output-file] *pki-file-name*

Synopsis	Output filename
Context	admin system security pki convert-file [output-file] <i>pki-file-name</i>
Tree	[output-file]
Description	This command specifies the output filename. If the filename already exists, the system prompts the user to proceed or aborts if the force command is unconfigured.
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crl-update

Synopsis	Trigger the CRL update for the CA profile
Context	admin system security pki crl-update
Tree	crl-update
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki crt-update ca-profile <i>reference</i>
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	state system security pki ca-profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est

Synopsis	Enter the est context
Context	admin system security pki est
Tree	est
Description	Commands in this context configure command options for Enrollment over Secure Transport (EST) protocol operations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-certificates

Synopsis	Download CA certificates from the EST server
Context	admin system security pki est ca-certificates
Tree	ca-certificates
Description	This command downloads a Certificate Authority (CA) certificate from an EST server specified by the profile name.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est-profile *string*

Synopsis	PKI EST profile name
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Context	admin system security pki est ca-certificates est-profile <i>string</i>
Tree	est-profile
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Force an overwrite of the result file
Context	admin system security pki est ca-certificates force
Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-url *cflash-url*

Synopsis	Path to the result file
Context	admin system security pki est ca-certificates output-url <i>cflash-url</i>
Tree	output-url
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enroll

Synopsis	Enroll a new certificate with CA with the EST protocol
Context	admin system security pki est enroll
Tree	enroll
Description	When specified, the system enrolls a new certificate with Certificate Authority (CA) by the EST protocol specified with the est-profile command with a imported private key specified by the key command.

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

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

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

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

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

domain-name *string*

Synopsis FQDNs for the Subject Alternative Name
Context [admin system security pki est enroll domain-name](#) *string*
Tree [domain-name](#)
Description This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.
String length 1 to 512
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

est-profile *string*

Synopsis PKI EST profile name
Context [admin system security pki est enroll est-profile](#) *string*
Tree [est-profile](#)
String length 1 to 32
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

force

Synopsis	Force an overwrite of the result file
Context	admin system security pki est enroll force
Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki est enroll hash-algorithm keyword
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki est enroll ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key *cflash-url*

Synopsis	Name of the imported the key file to enroll
Context	admin system security pki est enroll key cflash-url
Tree	key
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)

	'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-file *pki-file-name*

Synopsis	Name of the result file
Context	admin system security pki est enroll output-file <i>pki-file-name</i>
Tree	output-file
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject-dn *string*

Synopsis	Subject of the requesting certificate
Context	admin system security pki est enroll subject-dn <i>string</i>
Tree	subject-dn
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C ST O OU CN}.
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate-certificate-chain

Synopsis	Validate result certificate chain before importing
Context	admin system security pki est enroll validate-certificate-chain
Tree	validate-certificate-chain
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

renew

Synopsis	Renew a CA certificate using the EST protocol
Context	admin system security pki est renew
Tree	renew
Description	<p>When specified, the system renews an imported certificate (specified by the certificate command) with a Certificate Authority (CA) using the EST protocol specified by the est-profile parameter, with an imported private key specified the key command. The key can be either the key of the certificate to be renewed or a new key.</p> <p>The authentication between system and EST server is specified by the est-profile parameter.</p> <p>The system uses the hash-alg command to generate the CSR in the EST request message.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate *cflash-url*

Synopsis	Name of the imported certificate file to renew
Context	admin system security pki est renew certificate cflash-url
Tree	certificate
String length	1 to 200
String format	<p>'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)</p> <p>'cflash-url' must have each path segment at most 99 characters</p>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est-profile *string*

Synopsis	PKI EST profile name
Context	admin system security pki est renew est-profile string
Tree	est-profile
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms	7705 SAR Gen 2
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force

Synopsis	Force an overwrite of the result file
Context	admin system security pki est renew force
Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki est renew hash-algorithm keyword
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key *cflash-url*

Synopsis	Imported key file of the certificate to renew
Context	admin system security pki est renew key cflash-url
Tree	key
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-file *pki-file-name*

Synopsis	Name of the result file
Context	admin system security pki est renew output-file pki-file-name

Tree	output-file
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate-certificate-chain

Synopsis	Validate result certificate chain before importing
Context	admin system security pki est renew validate-certificate-chain
Tree	validate-certificate-chain
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Export an imported file
Context	admin system security pki export
Tree	export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format *keyword*

Synopsis	Output file format
Context	admin system security pki export format <i>keyword</i>
Tree	format
Options	pkcs12, pkcs7-der, pkcs7-pem, pem, der
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

input-file *pki-file-name*

Synopsis	Name of the file to be exported
Context	admin system security pki export input-file <i>pki-file-name</i>
Tree	input-file
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-file *pki-file-name*

Synopsis	Name of the key file to be exported
Context	admin system security pki export key-file <i>pki-file-name</i>
Tree	key-file
Description	This command specifies the name of the key file to be exported when the output format may contain the certificate and the key.
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-url *cflash-url*

Synopsis	Full path to export the result file
Context	admin system security pki export output-url <i>cflash-url</i>
Tree	output-url
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

password *string*

Synopsis Password used to encrypt the output file

Context [admin system security pki export password](#) *string*

Tree [password](#)

String length 1 to 32

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

type *keyword*

Synopsis Type of file to be exported

Context [admin system security pki export type](#) *keyword*

Tree [type](#)

Options certificate, key, crl

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate-csr

Synopsis Generate a PKCS#10 certificate signing request file

Context [admin system security pki generate-csr](#)

Tree [generate-csr](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

domain-name *string*

Synopsis FQDNs for the Subject Alternative Name

Context [admin system security pki generate-csr domain-name](#) *string*

Tree [domain-name](#)

Description	This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.
String length	1 to 512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki generate-csr hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki generate-csr ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-url *cflash-url*

Synopsis	Full path to the key file used to generate the request
Context	admin system security pki generate-csr key-url <i>cflash-url</i>
Tree	key-url
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-url *cflash-url*

Synopsis	Full path to result certificate signing request file
Context	admin system security pki generate-csr output-url cflash-url
Tree	output-url
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject-dn *string*

Synopsis	Subject of the requesting certificate
Context	admin system security pki generate-csr subject-dn string
Tree	subject-dn
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C ST O OU CN}.
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-printable

Synopsis	Force ASCII encoding for input subject DN attributes
Context	admin system security pki generate-csr use-printable
Tree	use-printable
Description	When specified, the system forces the use of ASCII encoding for the input subject DN attributes. Otherwise, the system uses UTF-8 encoding.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

generate-keypair

Synopsis Generate PKI key pair

Context [admin system security pki generate-keypair](#)

Tree [generate-keypair](#)

Description When specified, the system generates an RSA, DSA, or ECDSA private/public key pair file

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dsa-key-size *number*

Synopsis Length of the DSA key to be generated

Context [admin system security pki generate-keypair dsa-key-size](#) *number*

Tree [dsa-key-size](#)

Range 512 to 8192

Default 2048

Notes The following elements are part of a mandatory choice: **dsa-key-size**, **ecdsa-curve**, or **rsa-key-size**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ecdsa-curve *keyword*

Synopsis Elliptic curve of the ECDSA key to be generated

Context [admin system security pki generate-keypair ecdsa-curve](#) *keyword*

Tree [ecdsa-curve](#)

Options secp256r1, secp384r1, secp521r1

Default secp256r1

Notes The following elements are part of a mandatory choice: **dsa-key-size**, **ecdsa-curve**, or **rsa-key-size**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rsa-key-size *number*

Synopsis	Length of the RSA key to be generated
Context	admin system security pki generate-keypair rsa-key-size <i>number</i>
Tree	rsa-key-size
Range	512 to 8192
Default	2048
Notes	The following elements are part of a mandatory choice: dsa-key-size , ecdsa-curve , or rsa-key-size .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[save-path] *cflash-url*

Synopsis	Full path to save the result key file
Context	admin system security pki generate-keypair [save-path] <i>cflash-url</i>
Tree	[save-path]
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

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

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format *keyword*

Synopsis	Output file format
Context	admin system security pki import format <i>keyword</i>
Tree	format
Options	pkcs12, pkcs7-der, pkcs7-pem, pem, der
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

input-url *cflash-url*

Synopsis	Full path to the file to import
Context	admin system security pki import input-url <i>cflash-url</i>
Tree	input-url
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-file *pki-file-name*

Synopsis	Name of the result file
Context	admin system security pki import output-file <i>pki-file-name</i>
Tree	output-file
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

password *string*

Synopsis Password used to encrypt the output file

Context [admin system security pki import password](#) *string*

Tree [password](#)

String length 1 to 32

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

type *keyword*

Synopsis Type of file to be exported

Context [admin system security pki import type](#) *keyword*

Tree [type](#)

Options certificate, key, crl

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

validate-certificate-chain

Synopsis Validate the certificate chain

Context [admin system security pki import validate-certificate-chain](#)

Tree [validate-certificate-chain](#)

Description When specified, the system validates the result certificate chain before it is imported.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

reload

Synopsis Reload key or certificate files

Context [admin system security pki reload](#)

Tree [reload](#)

Description	When specified, the system reloads the key or certificate files for the specified application. This command can be used to ensure a changed imported file takes effect.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

application *keyword*

Synopsis	Application to be reloaded
Context	admin system security pki reload application <i>keyword</i>
Tree	application
Options	ipsec
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate *pki-file-name*

Synopsis	Name of the certificate file to reload
Context	admin system security pki reload certificate <i>pki-file-name</i>
Tree	certificate
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key *pki-file-name*

Synopsis	Name of the key file to reload
Context	admin system security pki reload key <i>pki-file-name</i>
Tree	key
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	admin system security pki show
Tree	show
Description	Commands in this context include operations to display the PKI file.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

file-content

Synopsis	Display content of certificate related files
Context	admin system security pki show file-content
Tree	file-content
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[file-path] cflash-url

Synopsis	Full path to the file to display
Context	admin system security pki show file-content [file-path] cflash-url
Tree	[file-path]
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format *keyword*

Synopsis	Format of the file to display
Context	admin system security pki show file-content format <i>keyword</i>
Tree	format
Options	pkcs10, pkcs12, pkcs7-der, pkcs7-pem, pem, der
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *string*

Synopsis	File decryption password
Context	admin system security pki show file-content password <i>string</i>
Tree	password
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Type of the file to display
Context	admin system security pki show file-content type <i>keyword</i>
Tree	type
Options	certificate, key, crl, csr
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-certificate

Synopsis	Update End Entity certificate
Context	admin system security pki update-certificate
Tree	update-certificate

Description	When specified, the system triggers an update for the specified certificate according to the corresponding configure system security pki certificate-auto-update configuration.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate *reference*

Synopsis	Name of the certificate file to be updated
Context	admin system security pki update-certificate <i>certificate reference</i>
Tree	certificate
Reference	state system security pki certificate-auto-update <i>pki-file-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secure-boot

Synopsis	Enter the secure-boot context
Context	admin system security secure-boot
Tree	secure-boot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activate

Synopsis	Activate secure boot on a CPM
Context	admin system security secure-boot activate
Tree	activate
Description	<p>This command activates Secure Boot to enforce digital signature verification of the software on every boot.</p> <p>After Secure Boot is activated on a CPM, the capability is permanently enabled and cannot be disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card reference

Synopsis	CPM slot where secure boot is activated or modified
Context	admin system security secure-boot activate card reference
Tree	card
Reference	state cpm cpm-card-slot
Notes	The following elements are part of a mandatory choice: card or ethernet-satellite .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirmation-code string-not-all-spaces

Synopsis	Confirmation code
Context	admin system security secure-boot activate confirmation-code string-not-all-spaces
Tree	confirmation-code
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

serial-number string-not-all-spaces

Synopsis	CPM card serial number which secure-boot activates
Context	admin system security secure-boot activate serial-number string-not-all-spaces
Tree	serial-number
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revoke-key

Synopsis	Revoke secure boot keys
Context	admin system security secure-boot revoke-key
Tree	revoke-key

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card *reference*

Synopsis	CPM slot where secure boot is activated or modified
Context	admin system security secure-boot revoke-key card <i>reference</i>
Tree	card
Reference	state cpm <i>cpm-card-slot</i>
Notes	The following elements are part of a mandatory choice: card or ethernet-satellite .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirmation-code *string-not-all-spaces*

Synopsis	Confirmation code
Context	admin system security secure-boot revoke-key confirmation-code <i>string-not-all-spaces</i>
Tree	confirmation-code
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

serial-number *string-not-all-spaces*

Synopsis	CPM card serial number which secure-boot activates
Context	admin system security secure-boot revoke-key serial-number <i>string-not-all-spaces</i>
Tree	serial-number
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-key

Synopsis	Update secure boot keys
Context	admin system security secure-boot update-key
Tree	update-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card reference

Synopsis	CPM slot where secure boot is activated or modified
Context	admin system security secure-boot update-key card reference
Tree	card
Reference	state cpm cpm-card-slot
Notes	The following elements are part of a mandatory choice: card or ethernet-satellite .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirmation-code *string-not-all-spaces*

Synopsis	Confirmation code
Context	admin system security secure-boot update-key confirmation-code string-not-all-spaces
Tree	confirmation-code
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

serial-number *string-not-all-spaces*

Synopsis	CPM card serial number which secure-boot activates
Context	admin system security secure-boot update-key serial-number string-not-all-spaces
Tree	serial-number
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

software-image *cflash-and-url*

Synopsis	Location of the target software image
Context	admin system security secure-boot update-key software-image <i>cflash-and-url</i>
Tree	software-image
String length	1 to 180
Notes	The following elements are part of a mandatory choice: software-image or software-repository .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate

Synopsis	Validate software signature for the specified image
Context	admin system security secure-boot validate
Tree	validate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

software-image *cflash-and-url*

Synopsis	Location of the target software image
Context	admin system security secure-boot validate software-image <i>cflash-and-url</i>
Tree	software-image
String length	1 to 180
Notes	The following elements are part of a mandatory choice: software-image or software-repository .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

storage-encryption

Synopsis	Enter the storage-encryption context
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Context	admin system security storage-encryption
Tree	storage-encryption
Description	Commands in this context are used to manage storage encryption such as the primary secret for hash3 configuration shared secrets.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

primary-secret

Synopsis	Enter the primary-secret context
Context	admin system security storage-encryption primary-secret
Tree	primary-secret
Description	Commands in this context manage the base secret used for encryption of items such as hash3 configuration shared secrets.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

set-secret

Synopsis	Set or change the primary secret
Context	admin system security storage-encryption primary-secret set-secret
Tree	set-secret
Description	<p>This command sets or changes the primary secret used as a base secret for encryption of items, such as hash3 configuration shared secrets. The user is prompted to enter the secret twice. If a primary secret is already set on this system, the user must enter the old secret to change it.</p> <p>Setting or changing the primary secret will cause the main configuration to be saved to disk.</p> <p>If the user is setting the primary secret on a replacement chassis as part of a chassis failure recovery, it is essential to run this command on the new chassis before copying the old configuration file from the failed chassis to the new chassis.</p>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

system-password

Synopsis	Change a local system password
----------	--------------------------------

Context	admin system security system-password
Tree	system-password
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-password

Synopsis	Administrative password
Context	admin system security system-password admin-password
Tree	admin-password
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telemetry

Synopsis	Enter the telemetry context
Context	admin system telemetry
Tree	telemetry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc

Synopsis	Enter the grpc context
Context	admin system telemetry grpc
Tree	grpc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cancel

Synopsis	Cancel the gRPC dynamic telemetry subscription
Context	admin system telemetry grpc cancel
Tree	cancel

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Cancel gRPC dynamic telemetry for all subscriptions
Context	admin system telemetry grpc cancel all
Tree	all
Notes	The following elements are part of a mandatory choice: all or subscription-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subscription-id *reference*

Synopsis	ID of the telemetry subscription to cancel
Context	admin system telemetry grpc cancel subscription-id reference
Tree	subscription-id
Reference	state system telemetry grpc subscription <i>number</i>
Notes	The following elements are part of a mandatory choice: all or subscription-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tech-support

Synopsis	Save technical support information to a file
Context	admin tech-support
Tree	tech-support
Description	<p>When executed, the router generates a file containing technical support information for analysis by Nokia technical support. If the file URL is omitted, and a directory is configured with the configure system security tech-support command, the technical support filename is generated in the ts-NAME.YYYYMMDD.HHMMUTC.suffix format.</p> <ul style="list-style-type: none"> NAME is the system name with special characters encoded using URL encoding (for example, a "." is encoded as "%2e") YYYYMMDD is the date, with leading zeros in each field HHMM is the time in hours and minutes in UTC time zone in 24-hour format, with leading zeros in each field .suffix: ".txt.gz" for state and diagnostic files, or ".dat" for extensive files

	Several levels of technical support information can be saved in cleartext or encrypted format.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diagnostic

Synopsis	Save cleartext state and encrypted diagnostic information
Context	admin tech-support diagnostic
Tree	diagnostic
Description	When executed, the router generates a file containing cleartext state and encrypted diagnostic information for analysis by Nokia technical support.
Notes	The following elements are part of a choice: diagnostic , extensive , or state .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

extensive

Synopsis	Save encrypted state and diagnostic information (default)
Context	admin tech-support extensive
Tree	extensive
Description	<p>When executed, the router generates a file containing encrypted state and diagnostic information for analysis by Nokia technical support.</p> <p>The router defaults to this output level when no level is specified for the tech-support command.</p>
Notes	The following elements are part of a choice: diagnostic , extensive , or state .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

state

Synopsis	Save cleartext state information
Context	admin tech-support state
Tree	state
Description	When executed, the router generates a file containing cleartext state information for analysis by Nokia technical support.

Notes	The following elements are part of a choice: diagnostic , extensive , or state .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

[url] url

Synopsis	URL to save technical support information
Context	admin tech-support [url] url
Tree	[url]
String length	1 to 180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

2.2 environment commands

See “Environment commands” in the *7705 SAR Gen 2 MD-CLI User Guide* for more information.

```
environment
- command-alias
- alias string
  - admin-state keyword
  - cli-command string
  - description string-not-all-spaces
  - mount-point (keyword | string)
  - python-script reference
- command-completion
- enter boolean
- space boolean
- tab boolean
- commit-options
- comment boolean
- confirm boolean
- console
  - length number
  - width number
- history
  - recall boolean
  - size number
- info-output
  - always-display
    - admin-state boolean
- match-highlight
  - admin-state keyword
  - style keyword
- message-severity-level
  - cli keyword
- more boolean
- progress-indicator
  - admin-state keyword
  - delay number
  - type keyword
- prompt
  - context boolean
  - newline boolean
  - timestamp boolean
  - uncommitted-changes-indicator boolean
- python
  - memory-reservation number
  - minimum-available-memory number
  - timeout number
- time-display keyword
- time-format keyword
```

2.2.1 environment command descriptions

environment

Synopsis	Configure the environment settings for this session
Context	environment
Tree	environment
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

command-alias

Synopsis	Enter the command-alias context
Context	environment command-alias
Tree	command-alias
Description	<p>Commands in this context create aliases to existing MD-CLI commands or to Python scripts.</p> <p>Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the alias list instance
Context	environment command-alias alias <i>string</i>
Tree	alias
Description	<p>Commands in this context create aliases to existing MD-CLI commands or to Python applications.</p> <p>Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[alias-name] *string*

Synopsis	Alias name
Context	environment command-alias alias <i>string</i>
Tree	alias
String length	1 to 64
String format	must only contain alpha-numeric characters, underscore or hyphen (not as the first character)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the alias
Context	environment command-alias alias <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Description	This command controls the administrative state of the MD-CLI alias. MD-CLI aliases that are administratively disabled cannot be executed, do not autocomplete in operational mode, and do not appear in ? help.
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-command *string*

Synopsis	CLI command to run when executing the alias
Context	environment command-alias alias <i>string</i> cli-command <i>string</i>
Tree	cli-command
String length	1 to 255
Notes	The following elements are part of a mandatory choice: cli-command or python-script .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *string-not-all-spaces*

Synopsis	Text description
Context	environment command-alias alias <i>string</i> description <i>string-not-all-spaces</i>
Tree	description
String length	1 to 110
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Add a list entry for mount-point
Context	environment command-alias alias <i>string</i> mount-point (<i>keyword</i> <i>string</i>)
Tree	mount-point
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Mount point where the alias is available
Context	environment command-alias alias <i>string</i> mount-point (<i>keyword</i> <i>string</i>)
Tree	mount-point
String length	1 to 255
String format	must start with forward slash
Options	global
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python-script *reference*

Synopsis	Python script to run when executing the alias
----------	---

Context	environment command-alias alias <i>string</i> python-script <i>reference</i>
Tree	python-script
Reference	state python python-script <i>named-item</i>
Notes	The following elements are part of a mandatory choice: cli-command or python-script .
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

command-completion

Synopsis	Enter the command-completion context
Context	environment command-completion
Tree	command-completion
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enter *boolean*

Synopsis	Complete the command when the Enter key is pressed
Context	environment command-completion enter <i>boolean</i>
Tree	enter
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

space *boolean*

Synopsis	Complete the command when the Space key is pressed
Context	environment command-completion space <i>boolean</i>
Tree	space
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tab *boolean*

Synopsis	Complete the command when the Tab key is pressed
Context	environment command-completion tab <i>boolean</i>
Tree	tab
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commit-options

Synopsis	Enter the commit-options context
Context	environment commit-options
Tree	commit-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

comment *boolean*

Synopsis	Require a commit comment when committing configuration
Context	environment commit-options comment <i>boolean</i>
Tree	comment
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirm *boolean*

Synopsis	Require confirmed commit when committing configuration
Context	environment commit-options confirm <i>boolean</i>
Tree	confirm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console

Synopsis	Enter the console context
Context	environment console
Tree	console
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length *number*

Synopsis	Number of lines displayed on the console
Context	environment console length <i>number</i>
Tree	length
Range	24 to 512
Default	24
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

width *number*

Synopsis	Number of columns displayed on the console
Context	environment console width <i>number</i>
Tree	width
Range	80 to 512
Default	80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

history

Synopsis	Enter the history context
Context	environment history
Tree	history
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

recall *boolean*

Synopsis	Allow command history recall and search execution
Context	environment history recall <i>boolean</i>
Tree	recall
Description	<p>When configured to true, the command history recall (!), substitution (!\$), display (:p, Esc+.), and backward search (Ctrl-R) are enabled.</p> <p>When configured to false, the command history can be displayed using the history command, but commands in the history cannot be executed.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Command history size
Context	environment history size <i>number</i>
Tree	size
Description	This command specifies the maximum size of the command history. A value of 0 disables the command history.
Range	0 to 1000
Default	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

info-output

Synopsis	Enter the info-output context
Context	environment info-output
Tree	info-output
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

always-display

Synopsis	Enter the always-display context
----------	---

Context	environment info-output always-display
Tree	always-display
Description	Commands in this context specify elements that are always displayed, regardless of whether they are set to their default value.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *boolean*

Synopsis	Always display admin-state elements
Context	environment info-output always-display admin-state boolean
Tree	admin-state
Description	When configured to true , the values of the admin-state elements in info output (without the detail option) are always displayed, even if they are the default values.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match-highlight

Synopsis	Enter the match-highlight context
Context	environment match-highlight
Tree	match-highlight
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of match highlighting
Context	environment match-highlight admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

style keyword

Synopsis	Match highlighting style
Context	environment match-highlight style keyword
Tree	style
Options	bold, underline, reverse
Max. instances	3
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

message-severity-level

Synopsis	Enter the message-severity-level context
Context	environment message-severity-level
Tree	message-severity-level
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli keyword

Synopsis	Message severity threshold for CLI messages
Context	environment message-severity-level cli keyword
Tree	cli
Options	warning, info
Default	info
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

more boolean

Synopsis	Activate the pager when output is longer than a screen
Context	environment more boolean
Tree	more
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

progress-indicator

Synopsis	Enter the progress-indicator context
Context	environment progress-indicator
Tree	progress-indicator
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the progress indicator
Context	environment progress-indicator admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay *number*

Synopsis	Delay before the progress indicator is displayed
Context	environment progress-indicator delay <i>number</i>
Tree	delay
Range	0 to 10000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Progress indicator output style
----------	---------------------------------

Context	environment progress-indicator type keyword
Tree	type
Options	dots
Default	dots
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prompt

Synopsis	Enter the prompt context
Context	environment prompt
Tree	prompt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

context *boolean*

Synopsis	Show the current command context in the prompt
Context	environment prompt context <i>boolean</i>
Tree	context
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

newline *boolean*

Synopsis	Add a new line before every prompt line
Context	environment prompt newline <i>boolean</i>
Tree	newline
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timestamp *boolean*

Synopsis	Show the timestamp before the first prompt line
Context	environment prompt timestamp <i>boolean</i>
Tree	timestamp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncommitted-changes-indicator *boolean*

Synopsis	Show an asterisk (*) when uncommitted changes exist
Context	environment prompt uncommitted-changes-indicator <i>boolean</i>
Tree	uncommitted-changes-indicator
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python

Synopsis	Enter the python context
Context	environment python
Tree	python
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

memory-reservation *number*

Synopsis	Memory reserved per Python interpreter
Context	environment python memory-reservation <i>number</i>
Tree	memory-reservation
Range	1 to 500
Units	megabytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-available-memory *number*

Synopsis	Minimum memory requirement to run a Python interpreter
Context	environment python minimum-available-memory <i>number</i>
Tree	minimum-available-memory
Range	5 to 50
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Maximum run time before a Python application is stopped
Context	environment python timeout <i>number</i>
Tree	timeout
Range	30 to 86400
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time-display *keyword*

Synopsis	Time zone to display time
Context	environment time-display <i>keyword</i>
Tree	time-display
Description	<p>This command configures the time zone for a timestamp displayed in outputs, such as event logs and show commands for the current CLI session.</p> <p>In event logs, the selected time is used to control the timestamps in the CLI output of show log log-id and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).</p> <p>Also see the configure log log-id time-format command.</p>
Options	local, utc
Default	local
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

time-format *keyword*

Synopsis	Format to display the date and time
Context	environment time-format <i>keyword</i>
Tree	time-format
Description	This command specifies the format of the time display in the prompt, configuration, state, and certain show command output in the current CLI session.
Options	iso-8601, rfc-1123, rfc-3339
Default	rfc-3339
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

2.3 file commands

See “File management” in the *7705 SAR Gen 2 Basic System Configuration Guide* for more information.

```

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

```

file remove router-instance

```

- router-instance string
- [url] (ftp-url | http-url-loose | sftp-url | sat-url | cflash-url | string-not-all-spaces)
- remove-directory
- force
- recursive
- router-instance string
- [url] (ftp-url | sftp-url | sat-url | cflash-url | string-not-all-spaces)
- repair
- [cflash-id] cflash-id
- secure-erase
- [cflash-id] cflash-id
- show
- client-tls-profile string
- direct-http
- proxy http-url
- router-instance string
- [url] (ftp-tftp-url | http-url-loose | sftp-url | sat-url | cflash-url | string-not-all-spaces)
- unzip
- create-destination
- [destination-url] (sat-url | cflash-url | string-not-all-spaces)
- force
- list
- router-instance string
- [source-url] (ftp-tftp-url | http-url-loose | sftp-url | sat-url | cflash-url | string-not-all-spaces)
- version
- [url] (sat-url | cflash-url | string-not-all-spaces | ftp-tftp-url)

```

2.3.1 file command descriptions

file

Synopsis	Perform file operations
Context	file
Tree	file
Description	Commands in this context execute file management operations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

change-directory

Synopsis	Change the working directory
Context	file change-directory
Tree	change-directory
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file change-directory router-instance <i>string</i>
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	New working directory URL
Context	file change-directory [url] (<i>ftp-url</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 180 (<i>ftp-url</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)

String format	<p>'ftp-url' must not contain illegal characters</p> <p>'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file)</p> <p>'sftp-url' must not contain illegal characters</p> <p>'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file)</p> <p>'sat-url' must start with sat: (e.g. sat:path/to/file)</p> <p>'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)</p> <p>'cflash-url' must have each path segment at most 99 characters</p> <p>'string-not-all-spaces' must contain at least one non-space character</p>
Default	.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

checksum

Synopsis	Compute and display checksums
Context	file checksum
Tree	checksum
Description	This command computes and displays an image file or a checksum for a file.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file checksum router-instance <i>string</i>
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[**type**] *keyword*

Synopsis	Checksum option type
Context	file checksum [type] <i>keyword</i>
Tree	[type]
Options	image, md5, sha256

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	File URL
Context	file checksum [url] (<i>ftp-tftp-url</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 199 (<i>ftp-tftp-url</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)
String format	'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file) 'ftp-tftp-url' must have valid hostname and optional path after scheme 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

copy

Synopsis	Copy files
Context	file copy
Tree	copy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile
Context	file copy client-tls-profile <i>string</i>

Tree	client-tls-profile
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination URL or '.' for the working directory
Context	file copy [destination-url] (<i>ftp-tftp-url</i> <i>http-url-loose</i> <i>scp-url</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[destination-url]
String length	1 to 199 (<i>ftp-tftp-url</i>) 1 to 180 (<i>http-url-loose</i> , <i>scp-url</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)
String format	'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file) 'ftp-tftp-url' must have valid hostname and optional path after scheme 'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path) 'scp-url' must be scp:// with optional user:pass@, hostname and path (e.g. scp://user:pass@hostname.domain/path/file) 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file copy direct-http
Tree	direct-http
Introduced	25.3.R2

Platforms	7705 SAR Gen 2
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force

Synopsis	Force copy without prompting before overwriting
Context	file copy force
Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy *http-url*

Synopsis	Connect over HTTP with a proxy
Context	file copy proxy http-url
Tree	proxy
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

recursive

Synopsis	Copy sub-directories encountered at the source URL
Context	file copy recursive
Tree	recursive
Description	This command recursively copies files and directories. If files or directories already exist, the operator is prompted to overwrite them. When the force command is enabled, a positive response to the overwrite prompts is assumed, and the operator is not prompted for confirmation. The existing files or directories are overwritten.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file copy router-instance string
Tree	router-instance

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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

Synopsis Source URL

Context [file copy \[source-url\]](#) (*ftp-tftp-url* | *http-url-loose* | *sftp-url* | *sat-url* | *cflash-url* | *string-not-all-spaces*)

Tree [\[source-url\]](#)

String length 1 to 199 (*ftp-tftp-url*)
 1 to 180 (*http-url-loose*)
 1 to 512 (*sftp-url*)
 1 to 200 (*sat-url*, *cflash-url*, *string-not-all-spaces*)

String format 'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file)
 'ftp-tftp-url' must have valid hostname and optional path after scheme
 'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path)
 'sftp-url' must not contain illegal characters
 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file)
 'sat-url' must start with sat: (e.g. sat:path/to/file)
 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
 'cflash-url' must have each path segment at most 99 characters
 'string-not-all-spaces' must contain at least one non-space character

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

disable

Synopsis Disable storage devices

Context [file disable](#)

Tree [disable](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

active

Synopsis	Disable all devices on the active CPM
Context	file disable active
Tree	active
Notes	The following elements are part of a choice: active , cflash-id , or standby .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cflash-id *cflash-id*

Synopsis	Disable the storage device
Context	file disable cflash-id cflash-id
Tree	cflash-id
String length	4 to 6
String format	'cflash-id' must be cf1-4: or cf1-4-A-D: (e.g. cf1: or cf2-B:)
Notes	The following elements are part of a choice: active , cflash-id , or standby .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby

Synopsis	Disable all devices on the standby CPM
Context	file disable standby
Tree	standby
Notes	The following elements are part of a choice: active , cflash-id , or standby .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

edit

Synopsis	Edit files with the text editor
Context	file edit
Tree	edit
Description	This command allows users to edit files with the text editor.

	See "Text editor" in the <i>7705 SAR Gen 2 Basic System Configuration Guide</i> for more information.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	File URL
Context	file edit [url] (<i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 200
String format	'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enable

Synopsis	Enable storage devices
Context	file enable
Tree	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

active

Synopsis	Enable all devices on the active CPM
Context	file enable active
Tree	active
Notes	The following elements are part of a choice: active , cflash-id , or standby .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cflash-id *cflash-id*

Synopsis	Enable the compact flash device
Context	file enable cflash-id cflash-id
Tree	cflash-id
String length	4 to 6
String format	'cflash-id' must be cf1-4: or cf1-4-A-D: (e.g. cf1: or cf2-B:)
Notes	The following elements are part of a choice: active , cflash-id , or standby .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby

Synopsis	Enable all devices on the standby CPM
Context	file enable standby
Tree	standby
Notes	The following elements are part of a choice: active , cflash-id , or standby .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format

Synopsis	Format a storage device
Context	file format
Tree	format
Description	This command formats a storage device with a new file system without erasing the data. The device must be administratively disabled first.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cflash-id] *cflash-id*

Synopsis	Format a storage device
Context	file format [cflash-id] cflash-id
Tree	[cflash-id]

String length	4 to 6
String format	'cflash-id' must be cf1-4: or cf1-4-A-D: (e.g. cf1: or cf2-B:)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

list

Synopsis	List directory contents
Context	file list
Tree	list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reverse

Synopsis	List files in reverse sort order
Context	file list reverse
Tree	reverse
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file list router-instance <i>string</i>
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[*sort-order*] *keyword*

Synopsis	Sort order for the directory
Context	file list [<i>sort-order</i>] <i>keyword</i>
Tree	[<i>sort-order</i>]
Options	date, name, size

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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

Synopsis Location of the directory to be listed

Context [file list \[url\]](#) (*ftp-url* | *sftp-url* | *sat-url* | *cflash-url* | *string-not-all-spaces*)

Tree [\[url\]](#)

String length 1 to 180 (*ftp-url*)
 1 to 512 (*sftp-url*)
 1 to 200 (*sat-url*, *cflash-url*, *string-not-all-spaces*)

String format 'ftp-url' must not contain illegal characters
 'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file)
 'sftp-url' must not contain illegal characters
 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file)
 'sat-url' must start with sat: (e.g. sat:path/to/file)
 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
 'cflash-url' must have each path segment at most 99 characters
 'string-not-all-spaces' must contain at least one non-space character

Default .

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

make-directory

Synopsis Make a directory

Context [file make-directory](#)

Tree [make-directory](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-instance *string*

Synopsis Router name or VPRN service name

Context [file make-directory router-instance](#) *string*

Tree [router-instance](#)

Introduced 25.10.R1
 Platforms 7705 SAR Gen 2

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

Synopsis Directory location

Context [file make-directory \[url\]](#) (*ftp-url* | *sftp-url* | *sat-url* | *cflash-url* | *string-not-all-spaces*)

Tree [\[url\]](#)

String length 1 to 180 (*ftp-url*)
 1 to 512 (*sftp-url*)
 1 to 200 (*sat-url*, *cflash-url*, *string-not-all-spaces*)

String format 'ftp-url' must not contain illegal characters
 'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file)
 'sftp-url' must not contain illegal characters
 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file)
 'sat-url' must start with sat: (e.g. sat:path/to/file)
 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
 'cflash-url' must have each path segment at most 99 characters
 'string-not-all-spaces' must contain at least one non-space character

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

move

Synopsis Move or rename files or directories

Context [file move](#)

Tree [move](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

client-tls-profile *string*

Synopsis Connect over HTTP with a client TLS profile

Context [file move client-tls-profile string](#)

Tree [client-tls-profile](#)

String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination URL or '.' for the working directory
Context	file move [destination-url] (<i>ftp-url</i> <i>http-url-loose</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[destination-url]
String length	1 to 180 (<i>ftp-url</i> , <i>http-url-loose</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)
String format	'ftp-url' must not contain illegal characters 'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file) 'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path) 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file move direct-http
Tree	direct-http
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Force move without prompting before overwriting
Context	file move force
Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy *http-url*

Synopsis	Connect over HTTP with a proxy
Context	file move proxy http-url
Tree	proxy
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file move router-instance string
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	Source URL
Context	file move [source-url] (<i>ftp-url http-url-loose sftp-url sat-url cflash-url string-not-all-spaces</i>)
Tree	[source-url]
String length	1 to 180 (<i>ftp-url, http-url-loose</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url, cflash-url, string-not-all-spaces</i>)
String format	'ftp-url' must not contain illegal characters 'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file)

'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path)
 'sftp-url' must not contain illegal characters
 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file)
 'sat-url' must start with sat: (e.g. sat:path/to/file)
 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
 'cflash-url' must have each path segment at most 99 characters
 'string-not-all-spaces' must contain at least one non-space character

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

permission

Synopsis	Show or set file permissions
Context	file permission
Tree	permission
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[attribute] keyword

Synopsis	File permission
Context	file permission [attribute] <i>keyword</i>
Tree	[attribute]
Options	read-only, read-write
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	File URL to set permissions
Context	file permission [url] (<i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 200
String format	'sat-url' must start with sat: (e.g. sat:path/to/file)

	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
	'cflash-url' must have each path segment at most 99 characters
	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove

Synopsis	Remove files
Context	file remove
Tree	remove
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile
Context	file remove client-tls-profile <i>string</i>
Tree	client-tls-profile
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file remove direct-http
Tree	direct-http
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Force removal without prompting
Context	file remove force

Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy *http-url*

Synopsis	Connect over HTTP with a proxy
Context	file remove proxy http-url
Tree	proxy
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file remove router-instance string
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	File URL
Context	file remove [url] (<i>ftp-url</i> <i>http-url-loose</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 180 (<i>ftp-url</i> , <i>http-url-loose</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)
String format	'ftp-url' must not contain illegal characters 'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file) 'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path) 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file)

	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
	'cflash-url' must have each path segment at most 99 characters
	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-directory

Synopsis	Remove directories
Context	file remove-directory
Tree	remove-directory
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force

Synopsis	Force removal without prompting
Context	file remove-directory force
Tree	force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

recursive

Synopsis	Remove directory and contents recursively
Context	file remove-directory recursive
Tree	recursive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file remove-directory router-instance <i>string</i>

Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	Directory URL
Context	file remove-directory [url] (<i>ftp-url</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 180 (<i>ftp-url</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)
String format	'ftp-url' must not contain illegal characters 'ftp-url' must be ftp:// with optional user:pass@, hostname and path (e.g. ftp://user:pass@hostname.domain/path/file) 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repair

Synopsis	Repair a storage device file system
Context	file repair
Tree	repair
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cflash-id] *cflash-id*

Synopsis	Storage device to repair
Context	file repair [cflash-id] <i>cflash-id</i>

Tree	[cflash-id]
String length	4 to 6
String format	'cflash-id' must be cf1-4: or cf1-4-A-D: (e.g. cf1: or cf2-B:)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secure-erase

Synopsis	Secure erase and format a storage device
Context	file secure-erase
Tree	secure-erase
Description	This command secure erases and formats a storage device with a new file system. The device must be administratively disabled first.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[cflash-id] cflash-id

Synopsis	Storage device to secure erase and format
Context	file secure-erase [cflash-id] cflash-id
Tree	[cflash-id]
Description	[
String length	4 to 6
String format	'cflash-id' must be cf1-4: or cf1-4-A-D: (e.g. cf1: or cf2-B:)
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

show

Synopsis	Display the contents of a file
Context	file show
Tree	show
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-tls-profile *string*

Synopsis	Connect over HTTP with a client TLS profile
Context	file show client-tls-profile <i>string</i>
Tree	client-tls-profile
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file show direct-http
Tree	direct-http
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy *http-url*

Synopsis	Connect over HTTP with a proxy
Context	file show proxy <i>http-url</i>
Tree	proxy
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file show router-instance <i>string</i>
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	File URL
Context	file show [url] (<i>ftp-tftp-url</i> <i>http-url-loose</i> <i>sftp-url</i> <i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i>)
Tree	[url]
String length	1 to 199 (<i>ftp-tftp-url</i>) 1 to 180 (<i>http-url-loose</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>)
String format	'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file) 'ftp-tftp-url' must have valid hostname and optional path after scheme 'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path) 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unzip

Synopsis	Unzip files
Context	file unzip
Tree	unzip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

create-destination

Synopsis	Create destination directory if it does not exist
Context	file unzip create-destination
Tree	create-destination

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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

Synopsis Destination URL or '.' for the working directory
 Context [file unzip \[destination-url\]](#) (*sat-url* | *cflash-url* | *string-not-all-spaces*)
 Tree [\[destination-url\]](#)
 String length 1 to 200
 String format 'sat-url' must start with sat: (e.g. sat:path/to/file)
 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
 'cflash-url' must have each path segment at most 99 characters
 'string-not-all-spaces' must contain at least one non-space character
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

force

Synopsis Force the unzip operation without prompting
 Context [file unzip force](#)
 Tree [force](#)
 Description When configured, files and directories that already exist in the destination URL are overwritten without prompting.
 The system does not automatically create directories explicitly specified by the destination URL. To allow the system to create new directories, use the **create-destination** command.
 When unconfigured, the system prompts the user before overwriting a file or directory.
 Notes The following elements are part of a choice: **force** or **list**.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

list

Synopsis List the file contents without the unzip operation
 Context [file unzip list](#)
 Tree [list](#)

Notes	The following elements are part of a choice: force or list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	file unzip router-instance <i>string</i>
Tree	router-instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	Source URL
Context	file unzip [source-url] (<i>ftp-tftp-url http-url-loose sftp-url sat-url cflash-url string-not-all-spaces</i>)
Tree	[source-url]
String length	1 to 199 (<i>ftp-tftp-url</i>) 1 to 180 (<i>http-url-loose</i>) 1 to 512 (<i>sftp-url</i>) 1 to 200 (<i>sat-url, cflash-url, string-not-all-spaces</i>)
String format	'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file) 'ftp-tftp-url' must have valid hostname and optional path after scheme 'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path) 'sftp-url' must not contain illegal characters 'sftp-url' must be sftp:// with optional user:pass@, hostname and path (e.g. sftp://user:pass@hostname.domain/path/file) 'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version

Synopsis	Display the version of an SR OS image file
Context	file version
Tree	version
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	File URL
Context	file version [url] (<i>sat-url</i> <i>cflash-url</i> <i>string-not-all-spaces</i> <i>ftp-tftp-url</i>)
Tree	[url]
String length	1 to 200 (<i>sat-url</i> , <i>cflash-url</i> , <i>string-not-all-spaces</i>) 1 to 199 (<i>ftp-tftp-url</i>)
String format	'sat-url' must start with sat: (e.g. sat:path/to/file) 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters 'string-not-all-spaces' must contain at least one non-space character 'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file) 'ftp-tftp-url' must have valid hostname and optional path after scheme
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

2.4 Global commands

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

```

- back number
- bof
  - exclusive
  - private
  - read-only
- configure
  - exclusive
  - global
  - private
  - read-only
- debug
  - exclusive
  - private
  - read-only
- delete instance-id
- edit-config
  - bof
  - debug
  - exclusive
  - global
  - li
  - private
  - read-only
- enable
- exec string
  - echo
- exit
  - all
- history
  - all
  - commands-only
- info keyword
  - [cli-path] cli-path-type
  - converted
  - depth number
  - detail
  - differences
  - flat
  - full-context
  - inheritance
  - json
  - model keyword
  - units
  - values
  - xml
- li
  - exclusive
  - private
  - read-only
- logout
- mrinfo
  - [router] (ipv4-address | string-not-all-spaces)
  - router-instance string
- mstat
  - destination (ipv4-address | string-not-all-spaces)
  - group (ipv4-multicast-address | string-not-all-spaces)

```


mstat router-instance

```

- router-instance string
- source (ipv4-address | string-not-all-spaces)
- ttl number
- wait number
- mstat2
- destination (ipv4-address | ipv6-address | string-not-all-spaces)
- group (ipv4-multicast-address | ipv6-multicast-address | string-not-all-spaces)
- router-instance string
- source (keyword | ipv4-address | ipv6-address | string-not-all-spaces)
- ttl number
- wait number
- mtrace
- destination (ipv4-address | string-not-all-spaces)
- group (ipv4-multicast-address | string-not-all-spaces)
- router-instance string
- source (ipv4-address | string-not-all-spaces)
- ttl number
- wait number
- mtrace2
- destination (ipv4-address | ipv6-address | string-not-all-spaces)
- group (ipv4-multicast-address | ipv6-multicast-address | string-not-all-spaces)
- router-instance string
- source (keyword | ipv4-address | ipv6-address | string-not-all-spaces)
- ttl number
- wait number
- oam
- efm
- local-loopback
- [action] keyword
- port-id port
- remote-loopback
- [action] keyword
- port-id port
- eth-cfm
- eth-test
- data-length number
- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- linktrace
- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- ttl number
- loopback
- [destination] (mac-unicast-address-no-zero | keyword | number)
- interval number
- lbm-padding number
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number
- send-count number
- size number
- timeout number
- one-way-delay-test
- [destination] (mac-unicast-address-no-zero | number)
- ma-admin-name reference
- md-admin-name reference
- mep-id number
- priority number

```

oam eth-cfm two-way-delay-test

- **two-way-delay-test**
 - **[destination]** (mac-unicast-address-no-zero | number)
 - **ma-admin-name** reference
 - **md-admin-name** reference
 - **mep-id** number
 - **priority** number
- **two-way-slm-test**
 - **[destination]** (mac-unicast-address-no-zero | number)
 - **interval** (number | decimal-number)
 - **ma-admin-name** reference
 - **md-admin-name** reference
 - **mep-id** number
 - **priority** number
 - **send-count** number
 - **size** number
 - **timeout** number
- **lsp-ping**
 - **bgp-label**
 - **fc** keyword
 - **interface** reference
 - **interval** number
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **path-destination** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **profile** keyword
 - **send-count** number
 - **size** number
 - **source-ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **timeout** number
 - **ttl** number
 - **ldp**
 - **fc** keyword
 - **interface** reference
 - **interval** number
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **path-destination** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **profile** keyword
 - **send-count** number
 - **size** number
 - **source-ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **timeout** number
 - **ttl** number
- **rsvp-te**
 - **fc** keyword
 - **interval** number
 - **lsp-name** reference
 - **path** reference
 - **profile** keyword
 - **send-count** number
 - **size** number
 - **source-ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **timeout** number
 - **ttl** number
- **sr-isis**
 - **fc** keyword
 - **flex-algo** number
 - **igp-instance** number
 - **interface** reference
 - **interval** number
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **path-destination** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **profile** keyword

oam lsp-ping sr-isis send-count

```

- send-count number
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- ttl number
- sr-ospf
- fc keyword
- flex-algo number
- igp-instance number
- interface reference
- interval number
- next-hop ipv4-address
- path-destination ipv4-address
- prefix (ipv4-prefix | ipv6-prefix)
- profile keyword
- send-count number
- size number
- source-ip-address ipv4-address
- timeout number
- ttl number
- sr-ospf3
- fc keyword
- igp-instance number
- interface reference
- interval number
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- prefix (ipv4-prefix | ipv6-prefix)
- profile keyword
- send-count number
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- ttl number
- sr-policy
- color number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- fc keyword
- interface reference
- interval number
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- profile keyword
- segment-list number
- send-count number
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- ttl number
- sr-te
- fc keyword
- interface reference
- interval number
- lsp-name reference
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- path reference
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- profile keyword
- send-count number
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- ttl number
- lsp-trace

```

oam lsp-trace bgp-label

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

oam lsp-trace sr-isis profile

```

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

```

oam lsp-trace sr-te interval

```

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

```

ping srv6-policy

```

- srv6-policy
- subscriber subscriber-id
- timeout number
- tos number
- ttl number
- pwc
- [path-type] keyword
- previous
- pyexec (string | string)
- [argument-01] string
- [argument-02] string
- [argument-03] string
- [argument-04] string
- [argument-05] string
- [argument-06] string
- [argument-07] string
- [argument-08] string
- [argument-09] string
- [argument-10] string
- [argument-11] string
- [argument-12] string
- [argument-13] string
- [argument-14] string
- [argument-15] string
- [argument-16] string
- [argument-17] string
- [argument-18] string
- [argument-19] string
- [argument-20] string
- quit-config
- ssh
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- key-re-exchange
- mbytes (number | keyword)
- minutes (number | keyword)
- login-name string-not-all-spaces
- port number
- private-key-file string
- router-instance (string | string)
- telnet
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- port number
- router-instance (string | string)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- top
- traceroute
- candidate-path
- color number
- decode keyword
- dest-port number
- dest-port-udp-fixed
- [destination] (ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)
- detail
- distinguisher number
- endpoint ipv6-unicast-or-zero-address
- min-ttl number
- numeric
- preference number
- probe-count number
- protocol keyword
- protocol-owner keyword
- router-instance string

```

traceroute segment-list

- **segment-list** *number*
- **size** *number*
- **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **srv6-policy**
- **tos** *number*
- **ttl** *number*
- **wait** *number*
- **tree**
 - **[cli-path]** *cli-path-type*
 - **depth** *number*
 - **detail**
 - **flat**
 - **[path-format]** *keyword*

2.4.1 Global command descriptions

back [*levels*] *number*

Synopsis	Move back one or more levels
Context	back <i>number</i>
Tree	back
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[levels] *number*

Synopsis	Number of levels to move up
Context	back <i>number</i>
Tree	back
Range	1 to 4294967295
MD-CLI default	1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bof

Synopsis	Enter a candidate configuration mode
Context	bof
Tree	bof
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclusive

Synopsis	Enter exclusive configuration mode
Context	bof exclusive
Tree	exclusive

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private

Synopsis	Enter private configuration mode
Context	bof private
Tree	private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

read-only

Synopsis	Enter read-only configuration mode
Context	bof read-only
Tree	read-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configure

Synopsis	Enter a candidate configuration mode
Context	configure
Tree	configure
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclusive

Synopsis	Enter exclusive configuration mode
Context	configure exclusive
Tree	exclusive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	Enter global configuration mode
Context	configure global
Tree	global
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private

Synopsis	Enter private configuration mode
Context	configure private
Tree	private
Introduced	25.3.R4
Platforms	7705 SAR Gen 2

read-only

Synopsis	Enter read-only configuration mode
Context	configure read-only
Tree	read-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug

Synopsis	Enter a candidate configuration mode
Context	debug
Tree	debug
Introduced	25.3.R1
Platforms	7705 SAR Gen 2

exclusive

Synopsis	Enter exclusive configuration mode
----------	------------------------------------

Context	debug exclusive
Tree	exclusive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private

Synopsis	Enter private configuration mode
Context	debug private
Tree	private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

read-only

Synopsis	Enter read-only configuration mode
Context	debug read-only
Tree	read-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delete [\[cli-path\]](#) *instance-id*

Synopsis	Delete an element
Context	delete <i>instance-id</i>
Tree	delete
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[cli-path\]](#) *instance-id*

Synopsis	Absolute path or relative path from pwc
Context	delete <i>instance-id</i>
Tree	delete
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

edit-config

Synopsis	Enter a configuration mode
Context	edit-config
Tree	edit-config
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bof

Synopsis	Enter the bof configuration context
Context	edit-config bof
Tree	bof
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug

Synopsis	Enter the debug configuration context
Context	edit-config debug
Tree	debug
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclusive

Synopsis	Enter exclusive configuration mode
Context	edit-config exclusive
Tree	exclusive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	Enter global configuration mode
Context	edit-config global
Tree	global
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

li

Synopsis	Enter the li configuration context
Context	edit-config li
Tree	li
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private

Synopsis	Enter private configuration mode
Context	edit-config private
Tree	private
Introduced	25.3.R4
Platforms	7705 SAR Gen 2

read-only

Synopsis	Enter read-only configuration mode
Context	edit-config read-only
Tree	read-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enable

Synopsis	Enable administrative mode
----------	----------------------------

Context	enable
Tree	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Execute commands from a file
Context	exec <i>string</i>
Tree	exec
Description	<p>Commands in this context execute the contents of a text file as if they were CLI commands entered by the user.</p> <p>The exec command should not be used to execute configuration files. Use the load command instead.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[url] *string*

Synopsis	Location of the file to be executed
Context	exec <i>string</i>
Tree	exec
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo

Synopsis	Display the commands as they are being executed
Context	exec <i>string</i> echo
Tree	echo
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exit

Synopsis	Return to the previous context or to operational root
Context	exit
Tree	exit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Return to the root context
Context	exit all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

history

Synopsis	Show the command history
Context	history
Tree	history
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Show the command history from all regions
Context	history all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commands-only

Synopsis	Show only the commands in the command history
----------	---

Context	history commands-only
Tree	commands-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Show the information under the present working context
Context	info keyword
Tree	info
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[from] *keyword*

Synopsis	Source datastore
Context	info keyword
Tree	info
Description	This command specifies the source datastore. This option is not supported for state elements.
Options	candidate – The candidate datastore running – The running datastore baseline – The baseline candidate configuration intended – The intended datastore
MD-CLI default	candidate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] *cli-path-type*

Synopsis	Absolute path or relative path from pwc
Context	info keyword [cli-path] <i>cli-path-type</i>
Tree	[cli-path]
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

converted

Synopsis Include converted third-party model configuration from the running datastore

Context [info keyword converted](#)

Tree [converted](#)

Description This option specifies the inclusion of converted configuration values from third-party models in the output and is only available when **configure system management-interface yang-modules openconfig-modules** is set to **true**.

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

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

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

depth *number*

Synopsis Depth limit from the pwc

Context [info keyword depth number](#)

Tree [depth](#)

Range 1 to 4294967040

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail

Synopsis Include default and unconfigured values

Context [info keyword detail](#)

Tree [detail](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

differences

Synopsis Show the different values each model tries to set

Context	info keyword differences
Tree	differences
Description	<p>When specified, this command shows only the values that are different when multiple models try to set the same configuration element.</p> <p>This option is supported only with the converted option and is available only when configure system management-interface yang-modules openconfig-modules is set to true.</p> <p>This option is not supported for state elements.</p>
Notes	The following elements are part of a choice: differences , model , or values .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flat

Synopsis	Show the context from the pwc on each line
Context	info keyword flat
Tree	flat
Description	This option shows the hierarchy on each line starting from the present working context.
Notes	The following elements are part of a choice: flat , json , or xml .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

full-context

Synopsis	Show the full context on each line
Context	info keyword full-context
Tree	full-context
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inheritance

Synopsis	Include configuration inherited from configuration groups
Context	info keyword inheritance
Tree	inheritance

Description	<p>This option specifies the inclusion of configuration inherited from configuration groups in the output.</p> <p>This option should only be used in the configure region when configuration groups are used. The output with this option is the same as info when used in other configuration regions.</p> <p>This option is not supported for state elements.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

json

Synopsis	Show the output in indented JSON IETF format
Context	info keyword json
Tree	json
Notes	The following elements are part of a choice: flat , json , or xml .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

model keyword

Synopsis	Data model for which to display converted output
Context	info keyword model keyword
Tree	model
Description	<p>This option specifies the data model for which to display the converted output.</p> <p>This option is supported only with the converted option and is available only when configure system management-interface yang-modules openconfig-modules is set to true.</p> <p>This option is not supported for state elements.</p>
Options	<p>all – All models</p> <p>openconfig – OpenConfig models</p>
Default	all
Notes	The following elements are part of a choice: differences , model , or values .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

units

Synopsis	Include unit types for applicable elements
Context	info keyword units
Tree	units
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

values

Synopsis	Show all the values each model tries to set
Context	info keyword values
Tree	values
Description	<p>When specified, this command shows all the values that each model tries to set.</p> <p>This option is supported only with the converted option and is available only when configure system management-interface yang-modules openconfig-modules is set to true.</p> <p>This option is not supported for state elements.</p>
Notes	The following elements are part of a choice: differences , model , or values .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

xml

Synopsis	Show the output in indented XML format
Context	info keyword xml
Tree	xml
Notes	The following elements are part of a choice: flat , json , or xml .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

li

Synopsis	Enter a candidate configuration mode
Context	li

Tree	li
Introduced	25.3.R1
Platforms	7705 SAR Gen 2

exclusive

Synopsis	Enter exclusive configuration mode
Context	li exclusive
Tree	exclusive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private

Synopsis	Enter private configuration mode
Context	li private
Tree	private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

read-only

Synopsis	Enter read-only configuration mode
Context	li read-only
Tree	read-only
Introduced	25.3.R1
Platforms	7705 SAR Gen 2

logout

Synopsis	Exit the CLI session
Context	logout
Tree	logout
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrinfo

Synopsis	Request multicast router information
Context	mrinfo
Tree	mrinfo
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[router] (*ipv4-address* | *string-not-all-spaces*)

Synopsis	Router IPv4 address or DNS name
Context	mrinfo [router] (<i>ipv4-address</i> <i>string-not-all-spaces</i>)
Tree	[router]
String length	1 to 128
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	mrinfo router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mstat

Synopsis	Trace multicast path from a source to a receiver and display multicast packet rate and loss information (IGMP based)
Context	mstat
Tree	mstat

Introduced 25.10.R1
Platforms 7705 SAR Gen 2

destination (*ipv4-address* | *string-not-all-spaces*)

Synopsis Destination IPv4 address or DNS name
Context [mstat destination](#) (*ipv4-address* | *string-not-all-spaces*)
Tree [destination](#)
String length 1 to 128
String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
'string-not-all-spaces' must contain at least one non-space character
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

group (*ipv4-multicast-address* | *string-not-all-spaces*)

Synopsis Multicast group IPv4 address or DNS name
Context [mstat group](#) (*ipv4-multicast-address* | *string-not-all-spaces*)
Tree [group](#)
String length 1 to 128
String format 'string-not-all-spaces' must contain at least one non-space character
Notes This element is mandatory.
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

router-instance *string*

Synopsis Router name or VPRN service name
Context [mstat router-instance](#) *string*
Tree [router-instance](#)
Default Base
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

source (*ipv4-address* | *string-not-all-spaces*)

Synopsis	Source IPv4 address or DNS name
Context	mstat source (<i>ipv4-address</i> <i>string-not-all-spaces</i>)
Tree	source
String length	1 to 128
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	Time to Live (TTL) included in the Mtrace Query packet
Context	mstat ttl <i>number</i>
Tree	ttl
Range	1 to 255
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

wait *number*

Synopsis	Wait time for the Mtrace Response packet
Context	mstat wait <i>number</i>
Tree	wait
Range	1 to 60
Units	seconds
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mstat2

Synopsis	Show the multicast route taken from a source to a destination with packet rate and loss information (UDP-based)
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Context	mstat2
Tree	mstat2
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

destination (*ipv4-address* | *ipv6-address* | *string-not-all-spaces*)

Synopsis	Destination IP address or DNS name
Context	mstat2 destination (<i>ipv4-address</i> <i>ipv6-address</i> <i>string-not-all-spaces</i>)
Tree	destination
String length	1 to 128
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'string-not-all-spaces' must contain at least one non-space character
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

group (*ipv4-multicast-address* | *ipv6-multicast-address* | *string-not-all-spaces*)

Synopsis	Multicast group IPv4 address or DNS name
Context	mstat2 group (<i>ipv4-multicast-address</i> <i>ipv6-multicast-address</i> <i>string-not-all-spaces</i>)
Tree	group
String length	1 to 128
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	mstat2 router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

source (*keyword* | *ipv4-address* | *ipv6-address* | *string-not-all-spaces*)

Synopsis Source IP address or DNS name

Context [mstat2 source](#) (*keyword* | *ipv4-address* | *ipv6-address* | *string-not-all-spaces*)

Tree [source](#)

String length 1 to 128

String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
 'string-not-all-spaces' must contain at least one non-space character

Options starg – Use a static (*,G) address

Notes This element is mandatory.

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

ttl number

Synopsis Time to Live (TTL) included in the Mtrace Query packet

Context [mstat2 ttl number](#)

Tree [ttl](#)

Range 1 to 255

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

wait number

Synopsis Wait time for the Mtrace Response packet

Context [mstat2 wait number](#)

Tree [wait](#)

Range 1 to 60

Units seconds

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

mtrace

Synopsis	Show the multicast route taken from a source to a destination (IGMP-based)
Context	mtrace
Tree	mtrace
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

destination (*ipv4-address* | *string-not-all-spaces*)

Synopsis	Destination IPv4 address or DNS name
Context	mtrace destination (<i>ipv4-address</i> <i>string-not-all-spaces</i>)
Tree	destination
String length	1 to 128
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'string-not-all-spaces' must contain at least one non-space character
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

group (*ipv4-multicast-address* | *string-not-all-spaces*)

Synopsis	Multicast group IPv4 address or DNS name
Context	mtrace group (<i>ipv4-multicast-address</i> <i>string-not-all-spaces</i>)
Tree	group
String length	1 to 128
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	mtrace router-instance <i>string</i>

Tree	router-instance
Default	Base
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

source (*ipv4-address* | *string-not-all-spaces*)

Synopsis	Source IPv4 address or DNS name
Context	mtrace source (<i>ipv4-address</i> <i>string-not-all-spaces</i>)
Tree	source
String length	1 to 128
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	Time to Live (TTL) included in the Mtrace Query packet
Context	mtrace ttl <i>number</i>
Tree	ttl
Range	1 to 255
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

wait *number*

Synopsis	Wait time for the Mtrace Response packet
Context	mtrace wait <i>number</i>
Tree	wait
Range	1 to 60
Units	seconds
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

mtrace2

Synopsis Show the multicast route taken from a source to a destination (UDP-based)

Context [mtrace2](#)

Tree [mtrace2](#)

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

destination (*ipv4-address* | *ipv6-address* | *string-not-all-spaces*)

Synopsis Destination IP address or DNS name

Context [mtrace2 destination](#) (*ipv4-address* | *ipv6-address* | *string-not-all-spaces*)

Tree [destination](#)

String length 1 to 128

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
'string-not-all-spaces' must contain at least one non-space character

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

group (*ipv4-multicast-address* | *ipv6-multicast-address* | *string-not-all-spaces*)

Synopsis Multicast group IPv4 address or DNS name

Context [mtrace2 group](#) (*ipv4-multicast-address* | *ipv6-multicast-address* | *string-not-all-spaces*)

Tree [group](#)

String length 1 to 128

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is mandatory.

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

router-instance *string*

Synopsis Router name or VPRN service name

Context	mtrace2 router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

source (*keyword* | *ipv4-address* | *ipv6-address* | *string-not-all-spaces*)

Synopsis	Source IP address or DNS name
Context	mtrace2 source (<i>keyword</i> <i>ipv4-address</i> <i>ipv6-address</i> <i>string-not-all-spaces</i>)
Tree	source
String length	1 to 128
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'string-not-all-spaces' must contain at least one non-space character
Options	starg – Use a static (*,G) address
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	Time to Live (TTL) included in the Mtrace Query packet
Context	mtrace2 ttl <i>number</i>
Tree	ttl
Range	1 to 255
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

wait *number*

Synopsis	Wait time for the Mtrace Response packet
Context	mtrace2 wait <i>number</i>
Tree	wait
Range	1 to 60

Units	seconds
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

oam

Synopsis	Perform OAM tests
Context	oam
Tree	oam
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

efm

Synopsis	Enter the efm context
Context	oam efm
Tree	efm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-loopback

Synopsis	Start or stop local loopback test on a port
Context	oam efm local-loopback
Tree	local-loopback
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[action] keyword

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

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-id *port*

Synopsis Port ID for the test
Context [oam efm local-loopback port-id](#) *port*
Tree [port-id](#)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

remote-loopback

Synopsis Start or stop remote loopback test on a port
Context [oam efm remote-loopback](#)
Tree [remote-loopback](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[action] *keyword*

Synopsis Action type for the test
Context [oam efm remote-loopback \[action\]](#) *keyword*
Tree [\[action\]](#)
Options start, stop
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-id *port*

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

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Initiate an Ethernet Connectivity Fault Management test
Context	oam eth-cfm
Tree	eth-cfm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Initiate an OAM ETH-CFM test
Context	oam eth-cfm eth-test
Tree	eth-test
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

data-length *number*

Synopsis	Size of the padding to be added to the frame
Context	oam eth-cfm eth-test data-length <i>number</i>
Tree	data-length
Range	64 to 1500
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

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

String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Association name
Context	oam eth-cfm eth-test ma-admin-name reference
Tree	ma-admin-name
Reference	state eth-cfm domain admin-name association admin-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm eth-test md-admin-name reference
Tree	md-admin-name
Reference	state eth-cfm domain admin-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm eth-test mep-id number
Tree	mep-id
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

priority *number*

Synopsis Frame priority that can be manipulated by QoS policies

Context [oam eth-cfm eth-test priority number](#)

Tree [priority](#)

Range 0 to 7

Default 7

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

linktrace

Synopsis Initiate a linktrace test

Context [oam eth-cfm linktrace](#)

Tree [linktrace](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Destination MAC address or remote MEP ID of the peer

Context [oam eth-cfm linktrace \[destination\]](#) (*mac-unicast-address-no-zero* | *number*)

Tree [\[destination\]](#)

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Range 1 to 8191

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ma-admin-name *reference*

Synopsis Association name

Context [oam eth-cfm linktrace ma-admin-name reference](#)

Tree	ma-admin-name
Reference	state eth-cfm domain <i>admin-name association admin-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm linktrace md-admin-name <i>reference</i>
Tree	md-admin-name
Reference	state eth-cfm domain <i>admin-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm linktrace mep-id <i>number</i>
Tree	mep-id
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	Time to live for a returned linktrace
Context	oam eth-cfm linktrace ttl <i>number</i>
Tree	ttl
Range	0 to 255
Default	64
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

loopback

Synopsis Initiate a loopback test

Context [oam eth-cfm loopback](#)

Tree [loopback](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Destination MAC address or remote MEP ID of the peer

Context [oam eth-cfm loopback \[destination\]](#) (*mac-unicast-address-no-zero* | *keyword* | *number*)

Tree [\[destination\]](#)

Description [None]

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Range 1 to 8191

Options multicast – Class one destination multicast address from level of local ME

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval *number*

Synopsis Time between probes within the test run

Context [oam eth-cfm loopback interval](#) *number*

Tree [interval](#)

Range 0 to 600

Units deciseconds

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lbn-padding *number*

Synopsis	Data portion size of the data TLV, no octet string
Context	oam eth-cfm loopback lbn-padding <i>number</i>
Tree	lbn-padding
Description	<p>This command configures the size of the data portion of the data TLV which does not allow for an optional octet string.</p> <p>MSDU is not processed when this setting is in use. This command and size are mutually exclusive.</p> <p>A value of 0 means that no data TLV is added to the packet. This is specified with an octet string.</p>
Range	0 3 to 9778
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Association name
Context	oam eth-cfm loopback ma-admin-name <i>reference</i>
Tree	ma-admin-name
Reference	state eth-cfm domain admin-name association <i>admin-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm loopback md-admin-name <i>reference</i>
Tree	md-admin-name
Reference	state eth-cfm domain <i>admin-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm loopback mep-id <i>number</i>
Tree	mep-id
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	oam eth-cfm loopback priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count *number*

Synopsis	Number of loopback messages to send
Context	oam eth-cfm loopback send-count <i>number</i>
Tree	send-count
Range	1 to 1024
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Data portion size of the data TLV, octet string allowed
Context	oam eth-cfm loopback size <i>number</i>
Tree	size

Description	This command specifies the size of the data portion of the data TLV allowing for an optional octet string to be included. This command and lbm-padding are mutually exclusive. A value of 0 means that no data TLV is added to the packet.
Range	0 to 1500
Units	bytes
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Wait time for a reply to a sent message request
Context	oam eth-cfm loopback timeout <i>number</i>
Tree	timeout
Description	This command specifies the time the router waits for a message reply after sending a message request. After expiration of the timeout, the router assumes that the message response is not received. Any response received after the timeout is silently discarded.
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-way-delay-test

Synopsis	Initiate a one-way delay test
Context	oam eth-cfm one-way-delay-test
Tree	one-way-delay-test
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

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

Context	oam eth-cfm one-way-delay-test [destination] (<i>mac-unicast-address-no-zero number</i>)
Tree	[destination]
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Association name
Context	oam eth-cfm one-way-delay-test ma-admin-name <i>reference</i>
Tree	ma-admin-name
Reference	state eth-cfm domain admin-name association admin-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm one-way-delay-test md-admin-name <i>reference</i>
Tree	md-admin-name
Reference	state eth-cfm domain admin-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm one-way-delay-test mep-id <i>number</i>
Tree	mep-id
Range	1 to 8191

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	oam eth-cfm one-way-delay-test <i>priority number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

two-way-delay-test

Synopsis	Initiate a two-way delay test
Context	oam eth-cfm two-way-delay-test
Tree	two-way-delay-test
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	oam eth-cfm two-way-delay-test [destination] (<i>mac-unicast-address-no-zero</i> <i>number</i>)
Tree	[destination]
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Association name
Context	oam eth-cfm two-way-delay-test ma-admin-name <i>reference</i>
Tree	ma-admin-name
Reference	state eth-cfm domain <i>admin-name</i> association <i>admin-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm two-way-delay-test md-admin-name <i>reference</i>
Tree	md-admin-name
Reference	state eth-cfm domain <i>admin-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm two-way-delay-test mep-id <i>number</i>
Tree	mep-id
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	oam eth-cfm two-way-delay-test priority <i>number</i>

Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

two-way-slm-test

Synopsis	Initiate a two-way SLM test in SAA
Context	oam eth-cfm two-way-slm-test
Tree	two-way-slm-test
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	oam eth-cfm two-way-slm-test [destination] (<i>mac-unicast-address-no-zero</i> <i>number</i>)
Tree	[destination]
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Time between probes within the test run
Context	oam eth-cfm two-way-slm-test interval (<i>number</i> <i>decimal-number</i>)
Tree	interval
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ma-admin-name *reference*

Synopsis Association name

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

Tree [ma-admin-name](#)

Reference **state eth-cfm domain admin-name association admin-name**

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

md-admin-name *reference*

Synopsis Domain name

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

Tree [md-admin-name](#)

Reference **state eth-cfm domain admin-name**

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mep-id *number*

Synopsis Local Maintenance Association Endpoint (MEP) ID

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

Tree [mep-id](#)

Range 1 to 8191

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority *number*

Synopsis Frame priority that can be manipulated by QoS policies

Context	oam eth-cfm two-way-slm-test priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count number

Synopsis	Number of two-way SLM test messages to send
Context	oam eth-cfm two-way-slm-test send-count number
Tree	send-count
Range	1 to 1000
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size number

Synopsis	Data portion size of the data TLV, octet string allowed
Context	oam eth-cfm two-way-slm-test size number
Tree	size
Description	This command specifies the size of the data portion of the Data TLV, allowing for an optional octet string to be included.
Range	0 to 1500
Units	bytes
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Wait time for a reply to a sent message request
Context	oam eth-cfm two-way-slm-test timeout number
Tree	timeout

Description	This command specifies the time the router waits for a message reply after sending a message request. After the expiration of the timeout, the router assumes that the message response is not received. Any response received after the timeout is silently discarded.
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ping

Synopsis	Perform a Label Switched Path (LSP) ping test
Context	oam lsp-ping
Tree	lsp-ping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-label

Synopsis	Perform a BGP-label LSP trace test
Context	oam lsp-ping bgp-label
Tree	bgp-label
Description	This command option performs a Border Gateway Protocol (BGP-label) LSP trace test using Target FEC Stack code point "BGP labeled IPv4 prefix".
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping bgp-label fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured)

	h2 – High 2 (high priority)
	ef – Expedited Forwarding (high priority)
	h1 – High 1 (high priority)
	nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping bgp-label interface reference
Tree	interface
Reference	state router <i>named-item-64 interface interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping bgp-label interval number
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping bgp-label next-hop (ipv4-address-no-zone ipv6-address-no-zone)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis IP address of the path destination

Context [oam lsp-ping bgp-label path-destination](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [path-destination](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Destination IP prefix for the test

Context [oam lsp-ping bgp-label prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis QoS profile for the transmitted echo request packets

Context [oam lsp-ping bgp-label profile](#) *keyword*

Tree [profile](#)

Options in – In profile
out – Out of profile

Default out

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

send-count *number*

Synopsis Number of echo request packets to send

Context [oam lsp-ping bgp-label send-count](#) *number*

Tree [send-count](#)

Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping bgp-label size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-ping bgp-label source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping bgp-label timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ttl *number*

Synopsis TTL value for the MPLS label of the echo request

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

Tree [ttl](#)

Range 1 to 255

Default 255

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ldp

Synopsis Perform an LDP LSP ping test

Context [oam lsp-ping ldp](#)

Tree [ldp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc *keyword*

Synopsis QoS forwarding class for the sent echo request packet

Context [oam lsp-ping ldp fc *keyword*](#)

Tree [fc](#)

Options be – Best Effort
l2 – Low 2 (best effort)
af – Assured Forwarding (assured)
l1 – Low 1 (assured)
h2 – High 2 (high priority)
ef – Expedited Forwarding (high priority)
h1 – High 1 (high priority)
nc – Network Control (high priority)

Default be

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping ldp interface <i>reference</i>
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping ldp interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping ldp next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

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

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping ldp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping ldp profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping ldp send-count <i>number</i>
Tree	send-count
Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size number

Synopsis	Echo request packet pad size
Context	oam lsp-ping ldp size number
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-ping ldp source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping ldp timeout number
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl number

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping ldp ttl number
Tree	ttl

Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te

Synopsis	Perform an RSVP-TE LSP ping test
Context	oam lsp-ping rsvp-te
Tree	rsvp-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping rsvp-te fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval number

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

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name reference

Synopsis	Name of the LSP to test
Context	oam lsp-ping rsvp-te lsp-name <i>reference</i>
Tree	lsp-name
Reference	state router <i>named-item-64</i> mpls lsp <i>named-item-64</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path reference

Synopsis	Name of the MPLS path to test
Context	oam lsp-ping rsvp-te path <i>reference</i>
Tree	path
Reference	state router <i>named-item-64</i> mpls path <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile keyword

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping rsvp-te profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping rsvp-te send-count <i>number</i>
Tree	send-count
Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping rsvp-te size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-ping rsvp-te source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping rsvp-te timeout <i>number</i>
Tree	timeout

Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttnumber

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping rsvp-te ttnumber
Tree	ttn
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis

Synopsis	Perform an SR-ISIS LSP ping test
Context	oam lsp-ping sr-isis
Tree	sr-isis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-isis fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)

Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-ping sr-isis flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance for the SR-ISIS test
Context	oam lsp-ping sr-isis igp-instance <i>number</i>
Tree	igp-instance
Range	0 to 127
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-isis interface <i>reference</i>
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-isis interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-isis next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-isis path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping sr-isis prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis QoS profile for the transmitted echo request packets

Context [oam lsp-ping sr-isis profile](#) *keyword*

Tree [profile](#)

Options in – In profile
 out – Out of profile

Default out

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

send-count *number*

Synopsis Number of echo request packets to send

Context [oam lsp-ping sr-isis send-count](#) *number*

Tree [send-count](#)

Range 1 to 100

Units packets

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

size *number*

Synopsis Echo request packet pad size

Context [oam lsp-ping sr-isis size](#) *number*

Tree [size](#)

Range 1 to 9786

Units bytes

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-ping sr-isis source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-isis timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping sr-isis ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf

Synopsis	Perform an SR-OSPF LSP ping test
Context	oam lsp-ping sr-ospf
Tree	sr-ospf
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fc keyword

Synopsis QoS forwarding class for the sent echo request packet

Context [oam lsp-ping sr-ospf fc keyword](#)

Tree [fc](#)

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Default be

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

flex-algo number

Synopsis Segment Routing Flexible Algorithm for the test

Context [oam lsp-ping sr-ospf flex-algo number](#)

Tree [flex-algo](#)

Range 128 to 255

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

igp-instance number

Synopsis IGP instance for the SR-OSPF test

Context [oam lsp-ping sr-ospf igp-instance number](#)

Tree [igp-instance](#)

Description This command specifies the IGP instance used to look up the node SID prefix.

Range 0 to 31

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface *reference*

Synopsis Egress router interface to use with path destination

Context [oam lsp-ping sr-ospf interface reference](#)

Tree [interface](#)

Reference **state router** *named-item-64 interface interface-name*

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval *number*

Synopsis Minimum time to expire before next echo request is sent

Context [oam lsp-ping sr-ospf interval number](#)

Tree [interval](#)

Range 1 to 10

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

next-hop *ipv4-address*

Synopsis Egress IP next hop address to use with path destination

Context [oam lsp-ping sr-ospf next-hop ipv4-address](#)

Tree [next-hop](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

path-destination *ipv4-address*

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-ospf path-destination <i>ipv4-address</i>
Tree	path-destination
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping sr-ospf prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping sr-ospf profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-ospf send-count <i>number</i>
Tree	send-count

Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-ospf size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-ip-address *ipv4-address*

Synopsis	Source IP address
Context	oam lsp-ping sr-ospf source-ip-address <i>ipv4-address</i>
Tree	source-ip-address
Description	This command specifies the source IP address. This command is used when an OAM packet must be generated from an address other than the system interface address of the node. The address must be from a prefix that is routable in the network.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-ospf timeout <i>number</i>
Tree	timeout
Range	1 to 10

Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping sr-ospf ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3

Synopsis	Perform an SR-OSPFv3 LSP ping test
Context	oam lsp-ping sr-ospf3
Tree	sr-ospf3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-ospf3 fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance for the SR-OSPFv3 test
Context	oam lsp-ping sr-ospf3 igp-instance <i>number</i>
Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-ospf3 interface <i>reference</i>
Tree	interface
Reference	state router <i>named-item-64 interface interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-ospf3 interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-ospf3 next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-ospf3 path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping sr-ospf3 prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping sr-ospf3 profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

send-count *number*

Synopsis Number of echo request packets to send
Context [oam lsp-ping sr-ospf3 send-count number](#)
Tree [send-count](#)
Range 1 to 100
Units packets
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

size *number*

Synopsis Echo request packet pad size
Context [oam lsp-ping sr-ospf3 size number](#)
Tree [size](#)
Range 1 to 9786
Units bytes
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Source IP address
Context [oam lsp-ping sr-ospf3 source-ip-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [source-ip-address](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

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

Context	oam lsp-ping sr-ospf3 timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl number

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping sr-ospf3 ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy

Synopsis	Perform an SR policy LSP ping test
Context	oam lsp-ping sr-policy
Tree	sr-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color number

Synopsis	Segment Routing color for the test
Context	oam lsp-ping sr-policy color <i>number</i>
Tree	color
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Segment Routing endpoint for the test

Context [oam lsp-ping sr-policy endpoint](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [endpoint](#)

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc keyword

Synopsis QoS forwarding class for the sent echo request packet

Context [oam lsp-ping sr-policy fc keyword](#)

Tree [fc](#)

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Default be

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface reference

Synopsis Egress router interface to use with path destination

Context [oam lsp-ping sr-policy interface reference](#)

Tree [interface](#)

Reference **state router** *named-item-64* **interface** *interface-name*

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-policy interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-policy next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-policy path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

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

Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	oam lsp-ping sr-policy segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-policy send-count <i>number</i>
Tree	send-count
Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-policy size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-ping sr-policy source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-policy timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping sr-policy ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te

Synopsis	Perform an SR-TE LSP ping test
Context	oam lsp-ping sr-te
Tree	sr-te
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fc keyword

Synopsis QoS forwarding class for the sent echo request packet

Context [oam lsp-ping sr-te fc keyword](#)

Tree [fc](#)

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Default be

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface reference

Synopsis Egress router interface to use with path destination

Context [oam lsp-ping sr-te interface reference](#)

Tree [interface](#)

Reference **state router** *named-item-64* **interface** *interface-name*

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval number

Synopsis Minimum time to expire before next echo request is sent

Context [oam lsp-ping sr-te interval number](#)

Tree [interval](#)

Range 1 to 10

Units seconds

Default 1

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *reference*

Synopsis	Name of the LSP to test
Context	oam lsp-ping sr-te lsp-name <i>reference</i>
Tree	lsp-name
Reference	state router <i>named-item-64</i> mpls lsp <i>named-item-64</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-te next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path *reference*

Synopsis	Name of the MPLS path to test
Context	oam lsp-ping sr-te path <i>reference</i>
Tree	path
Reference	state router <i>named-item-64</i> mpls path <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-te path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping sr-te profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-te send-count <i>number</i>
Tree	send-count
Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-te size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Source IP address
Context [oam lsp-ping sr-te source-ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
Tree [source-ip-address](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

Synopsis Time to wait for a reply after sending an echo request
Context [oam lsp-ping sr-te timeout](#) *number*
Tree [timeout](#)
Range 1 to 10
Units seconds
Default 5
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ttl *number*

Synopsis TTL value for the MPLS label of the echo request
Context [oam lsp-ping sr-te ttl](#) *number*
Tree [ttl](#)
Range 1 to 255
Default 255
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lsp-trace

Synopsis Perform a Label Switched Path (LSP) trace test
Context [oam lsp-trace](#)

Tree	lsp-trace
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-label

Synopsis	Perform a BGP-label LSP trace test
Context	oam lsp-trace bgp-label
Tree	bgp-label
Description	This option performs an LSP trace test using Target FEC Stack sub-type "BGP labeled IPv4 prefix".
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace bgp-label downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace bgp-label fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)

Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace bgp-label interface reference
Tree	interface
Reference	state router <i>named-item-64 interface interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace bgp-label interval number
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace bgp-label max-fail number
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace bgp-label max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace bgp-label min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace bgp-label next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace bgp-label output-format <i>keyword</i>
Tree	output-format
Options	summary, detail

Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-trace bgp-label path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace bgp-label prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace bgp-label probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace bgp-label profile <i>keyword</i>

Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace bgp-label size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-trace bgp-label source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace bgp-label timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp

Synopsis	Perform an LDP LSP trace test
Context	oam lsp-trace ldp
Tree	ldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace ldp downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace ldp fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace ldp interface reference
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace ldp interval number
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace ldp max-fail number
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace ldp max-ttl number

Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace ldp min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace ldp next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace ldp output-format <i>keyword</i>
Tree	output-format
Options	summary, detail
Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-trace ldp path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace ldp prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace ldp probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace ldp profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace ldp size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-trace ldp source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace ldp timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te

Synopsis	Perform an RSVP-TE LSP trace test
Context	oam lsp-trace rsvp-te
Tree	rsvp-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace rsvp-te downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace rsvp-te fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace rsvp-te interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *reference*

Synopsis	Name of the LSP to test
Context	oam lsp-trace rsvp-te lsp-name <i>reference</i>
Tree	lsp-name
Reference	state router <i>named-item-64</i> mpls lsp <i>named-item-64</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace rsvp-te max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace rsvp-te max-ttl <i>number</i>

Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace rsvp-te min-ttl number
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace rsvp-te output-format keyword
Tree	output-format
Options	summary, detail
Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path *reference*

Synopsis	Name of the MPLS path to test
Context	oam lsp-trace rsvp-te path reference
Tree	path
Reference	state router <i>named-item-64</i> mpls path <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace rsvp-te probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace rsvp-te profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace rsvp-te size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
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Context	oam lsp-trace rsvp-te source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace rsvp-te timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis

Synopsis	Perform an SR-ISIS LSP trace test
Context	oam lsp-trace sr-isis
Tree	sr-isis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-isis downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-isis fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo number

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-trace sr-isis flex-algo number
Tree	flex-algo
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance number

Synopsis	IGP instance for the SR-ISIS test
Context	oam lsp-trace sr-isis igp-instance number
Tree	igp-instance
Range	0 to 127
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-isis interface <i>reference</i>
Tree	interface
Reference	state router <i>named-item-64 interface interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-isis interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-isis max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-isis max-ttl <i>number</i>

Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-isis min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-isis next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-isis output-format <i>keyword</i>
Tree	output-format
Options	summary, detail
Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-isis path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-isis prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-isis probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-isis profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-isis size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-trace sr-isis source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-isis timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf

Synopsis	Perform an SR-OSPF LSP trace test
Context	oam lsp-trace sr-ospf
Tree	sr-ospf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-ospf downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-ospf fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	oam lsp-trace sr-ospf flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance for the SR-OSPF test
Context	oam lsp-trace sr-ospf igp-instance <i>number</i>
Tree	igp-instance
Description	This command specifies the IGP instance used to look up the node SID prefix.
Range	0 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-ospf interface <i>reference</i>
Tree	interface
Reference	state router <i>named-item-64 interface interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-ospf interval <i>number</i>
Tree	interval

Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-ospf max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-ospf max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-ospf min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

next-hop *ipv4-address*

Synopsis Egress IP next hop address to use with path destination

Context [oam lsp-trace sr-ospf next-hop ipv4-address](#)

Tree [next-hop](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

output-format *keyword*

Synopsis Output format for the result

Context [oam lsp-trace sr-ospf output-format keyword](#)

Tree [output-format](#)

Options summary, detail

Default summary

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

path-destination *ipv4-address*

Synopsis IP address of the path destination

Context [oam lsp-trace sr-ospf path-destination ipv4-address](#)

Tree [path-destination](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Destination IP prefix for the test

Context	oam lsp-trace sr-ospf prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-ospf probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-ospf profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-ospf size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-ip-address *ipv4-address*

Synopsis	Source IP address
Context	oam lsp-trace sr-ospf source-ip-address <i>ipv4-address</i>
Tree	source-ip-address
Description	This command specifies the source IP address. This command is used when an OAM packet must be generated from an address other than the system interface address of the node. The address must be from a prefix that is routable in the network.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-ospf timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3

Synopsis	Perform an SR-OSPFv3 LSP trace test
Context	oam lsp-trace sr-ospf3
Tree	sr-ospf3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-ospf3 downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-ospf3 fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance number

Synopsis	IGP instance for the SR-OSPFv3 test
Context	oam lsp-trace sr-ospf3 igp-instance number
Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-ospf3 interface reference
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval number

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-ospf3 interval number
Tree	interval
Range	1 to 10
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail number

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-ospf3 max-fail number
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl number

Synopsis	Maximum TTL
Context	oam lsp-trace sr-ospf3 max-ttl number

Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-ospf3 min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-ospf3 next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-ospf3 output-format <i>keyword</i>
Tree	output-format
Options	summary, detail
Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-ospf3 path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-ospf3 prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-ospf3 probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-ospf3 profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-ospf3 size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-trace sr-ospf3 source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-ospf3 timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy

Synopsis	Perform an SR policy LSP trace test
Context	oam lsp-trace sr-policy
Tree	sr-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color number

Synopsis	Segment Routing color for the test
Context	oam lsp-trace sr-policy color number
Tree	color
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-policy downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Segment Routing endpoint for the test
Context	oam lsp-trace sr-policy endpoint (ipv4-address-no-zone ipv6-address-no-zone)
Tree	endpoint
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-policy fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-policy interface reference
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

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

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-policy max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-policy max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-policy min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-policy next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-policy output-format <i>keyword</i>
Tree	output-format
Options	summary, detail
Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-policy path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-policy probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis QoS profile for the transmitted echo request packets

Context [oam lsp-trace sr-policy profile](#) *keyword*

Tree [profile](#)

Options in – In profile
 out – Out of profile

Default out

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

segment-list *number*

Synopsis Segment Routing segment list for the test

Context [oam lsp-trace sr-policy segment-list](#) *number*

Tree [segment-list](#)

Range 1 to 32

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

size *number*

Synopsis Echo request packet pad size

Context [oam lsp-trace sr-policy size](#) *number*

Tree [size](#)

Range 1 to 9786

Units bytes

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-trace sr-policy source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-policy timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te

Synopsis	Perform an SR-TE LSP trace test
Context	oam lsp-trace sr-te
Tree	sr-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-te downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV none – No mapping TLV

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-te fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-te interface reference
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

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

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *reference*

Synopsis	Name of the LSP to test
Context	oam lsp-trace sr-te lsp-name <i>reference</i>
Tree	lsp-name
Reference	state router <i>named-item-64 mpls lsp named-item-64</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-te max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-te max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-te min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-te next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-te output-format <i>keyword</i>
Tree	output-format
Options	summary, detail
Default	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path *reference*

Synopsis	Name of the MPLS path to test
Context	oam lsp-trace sr-te path <i>reference</i>
Tree	path
Reference	state router <i>named-item-64</i> mpls path <i>named-item-64</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-te path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-te probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-te profile <i>keyword</i>
Tree	profile
Options	in – In profile out – Out of profile
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Echo request packet pad size
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Context	oam lsp-trace sr-te size <i>number</i>
Tree	size
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address
Context	oam lsp-trace sr-te source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-te timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-treetrace

Synopsis	Perform a Label Switched Path (LSP) treetrace test
Context	oam lsp-treetrace
Tree	lsp-treetrace
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

sr-ospf

Synopsis	Perform an LSP tree trace test for SR-OSPF
Context	oam lsp-tree trace sr-ospf
Tree	sr-ospf
Description	<p>When specified, the router performs an LSP tree trace test for an IPv4 SR-OSPF node-SID tunnel.</p> <p>When the user runs this command, the sender node originates successive TTL incrementing LSP trace probes to discover the ECMP paths of an IPv4 SR-OSPF node-SID tunnel. The probes operate on the IPv4 SR-OSPF tunnel prefix in the specified OSPFv2 instance and on the node SID programmed in Segment Routing algorithm zero topology.</p>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

downstream-map-tlv keyword

Synopsis	Downstream Mapping TLV type in MPLS Echo Request PDU
Context	oam lsp-tree trace sr-ospf downstream-map-tlv keyword
Tree	downstream-map-tlv
Description	This command specifies the format of the Downstream Mapping TLV to use in the transmitted Echo Request packets.
Options	dsmap – Send a Downstream Mapping TLV ddmmap – Send a Downstream Detailed Mapping TLV
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	QoS FC for the transmitted Echo Request packets
Context	oam lsp-tree trace sr-ospf fc keyword
Tree	fc
Description	<p>This command specifies the command options used to indicate the forwarding class and profile of the MPLS Echo Request packet.</p> <p>When the CPM generates an MPLS Echo Request packet and forwards it to the outgoing interface, the packet is queued in the egress network queue corresponding to the specified FC and profile command options. The LSP-EXP mappings on the outgoing interface control the marking of the packet MPLS header EXP field.</p>

When the responding node receives the MPLS Echo Request packet, the LSP-EXP mappings of the incoming interface control the FC and profile command options.

When the CPM generates an MPLS Echo Reply packet and forwards it to the outgoing interface, the packet is queued in the egress network queue corresponding to the command option values. These values are derived from the classification of the Echo Request packet, which is being replied to, at the incoming interface. The LSP-EXP mappings on the outgoing interface control the marking of the EXP of the packet MPLS header EXP field. The ToS byte is not modified.

Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance for the SR-OSPF test
Context	oam lsp-treetrace sr-ospf igp-instance <i>number</i>
Tree	igp-instance
Description	This command specifies the IGP instance used to look up the node SID prefix.
Range	0 to 31
Default	0
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

max-fail *number*

Synopsis	Maximum number of consecutive timeouts allowed
Context	oam lsp-treetrace sr-ospf max-fail <i>number</i>
Tree	max-fail
Description	This command specifies the maximum number of consecutive timeouts allowed before terminating the test.
Range	1 to 255

Default	5
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

max-path *number*

Synopsis	Maximum number of paths discoverable for the LSP prefix
Context	oam lsp-treetrace sr-ospf max-path <i>number</i>
Tree	max-path
Description	This command specifies the maximum number of paths that can be successfully discovered for the specific LSP prefix. The paths that fail to reach the specific LSP prefix destination, while included in the result, are not considered as part of this limit.
Range	1 to 256
Default	128
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

max-ttl *number*

Synopsis	Maximum time-to-live value for the test
Context	oam lsp-treetrace sr-ospf max-ttl <i>number</i>
Tree	max-ttl
Description	This command specifies the TTL value for the treetrace test of the transmitted MPLS Echo Request packets.
Range	1 to 255
Default	30
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Format of display output
Context	oam lsp-treetrace sr-ospf output-format <i>keyword</i>
Tree	output-format
Options	summary – Display summarized information detail – Display detailed information

Default	summary
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

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

Synopsis	IP prefix for the test
Context	oam lsp-treetrace sr-ospf prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Description	This command specifies the address and length of the target node-SID prefix of the IPv4 SR-OSPF tunnel.
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	QoS profile for the transmitted Echo Request packets
Context	oam lsp-treetrace sr-ospf profile <i>keyword</i>
Tree	profile
Description	This command specifies the QoS profile state setting of the transmitted MPLS Echo Request packets.
Options	in – In profile out – Out of profile
Default	out
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

source-ip-address *ipv4-address*

Synopsis	Source IP address
Context	oam lsp-treetrace sr-ospf source-ip-address <i>ipv4-address</i>
Tree	source-ip-address
Description	This command specifies the source IP address. This command is used when an OAM packet must be generated from an address other than the system interface address of the node. The address must be from a prefix that is routable in the network.

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time router waits for reply after sending Echo Request
Context	oam lsp-treetrace sr-ospf timeout <i>number</i>
Tree	timeout
Description	<p>This command specifies the time used to override the default timeout value and is the amount of time that the router waits for an Echo Reply message after sending the Echo Request message.</p> <p>After the expiration of the message timeout, the requesting router assumes that the Echo Reply message is not received. The system displays a Request Timeout message for each Echo Request message sent that expires. Any response Echo Reply message received after the request times out is silently discarded.</p>
Range	1 to 60
Units	seconds
Default	3
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

oam-pm

Synopsis	Initiate an on-demand OAM Performance Monitoring test
Context	oam oam-pm
Tree	oam-pm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	OAM-PM test action
Context	oam oam-pm action <i>keyword</i>
Tree	action
Options	start, stop

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session reference

Synopsis	OAM-PM session name
Context	oam oam-pm session reference
Tree	session
Reference	state oam-pm session <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-type keyword

Synopsis	Test type
Context	oam oam-pm test-type keyword
Tree	test-type
Options	dm – MPLS Delay Measurement test dmm – Ethernet Delay Measurement Message test lmm – Ethernet Loss Measurement Message test slm – Ethernet Synthetic Loss Message test twamp-light – IP Two-Way Active Measurement Protocol (Light) test
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

saa

Synopsis	Start or stop a Service Assurance Agent test
Context	oam saa
Tree	saa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner [**owner-name**] *reference test reference*

Synopsis	SAA owner name
Context	oam saa owner <i>reference test reference</i>
Tree	owner
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[owner-name] *reference*

Synopsis	Name of the owner of SAA test
Context	oam saa owner <i>reference test reference</i>
Tree	owner
MD-CLI default	TIMOS CLI
Reference	state saa owner <i>named-item test named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test *reference*

Synopsis	Name of the SAA test
Context	oam saa owner <i>reference test reference</i>
Tree	owner
Reference	state saa owner <i>named-item test named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start

Synopsis	Start the SAA test
Context	oam saa owner <i>reference test reference start</i>
Tree	start

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

accounting *boolean*

Synopsis Disable recording results in accounting policy
Context [oam saa owner](#) *reference* [test](#) *reference* [start accounting boolean](#)
Tree [accounting](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

stop

Synopsis Stop the SAA test
Context [oam saa owner](#) *reference* [test](#) *reference* [stop](#)
Tree [stop](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

accounting *boolean*

Synopsis Disable recording results in accounting policy
Context [oam saa owner](#) *reference* [test](#) *reference* [stop accounting boolean](#)
Tree [accounting](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

service-activation-testhead

Synopsis Start or stop Service Activation Testhead service test
Context [oam service-activation-testhead](#)
Tree [service-activation-testhead](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

service-test [\[service-test-name\]](#) *reference*

Synopsis Service test name

Context [oam service-activation-testhead service-test](#) *reference*

Tree [service-test](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[service-test-name] *reference*

Synopsis Name of the service test to be started or stopped

Context [oam service-activation-testhead service-test](#) *reference*

Tree [service-test](#)

Reference **state test-oam** *named-item-64*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start

Synopsis Start OAM SATH service test

Context [oam service-activation-testhead service-test](#) *reference* **start**

Tree [start](#)

Description This command starts an OAM Service Activation Testhead (SATH) service test.

 Only one instance of a service test is allowed for the specified *service-test-name*. If the user attempts to start another instance of a service test for the same *service-test-name* while the current instance is still running, an error is generated.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

stop

Synopsis Stop OAM SATH service test

Context [oam service-activation-testhead service-test](#) *reference* **stop**

Tree	stop
Description	This command stops an OAM Service Activation Testhead (SATH) service test. If the user attempts to stop a service test that is already complete, an error is generated.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password

Synopsis	Change the local user password
Context	password
Tree	password
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping

Synopsis	Ping an IP address or DNS name
Context	ping
Tree	ping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bypass-routing

Synopsis	Bypass routing table when sending ping request to host
Context	ping bypass-routing
Tree	bypass-routing
Description	When configured, the system bypasses the routing table when sending the ping request to a host on a directly-attached network. If the host is not on a directly-attached network, an error is returned.
Notes	The following elements are part of a choice: bypass-routing , interface , next-hop-address , or subscriber .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

candidate-path

Synopsis	Ping candidate path of the SRv6 policy
Context	ping candidate-path
Tree	candidate-path
Description	When configured, this command allows the user to specify a candidate path of the SRv6 policy to ping. The candidate path does not need to be the currently active candidate path.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color number

Synopsis	Color identifier of the Segment Routing IPv6 policy
Context	ping color number
Tree	color
Max. range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count number

Synopsis	Number of ping requests to send to the remote host
Context	ping count number
Tree	count
Range	1 to 100000
Units	packets
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP address or DNS name
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Context	ping [destination] (<i>ipv4-address-with-zone ipv6-address-with-zone string-not-all-spaces</i>)
Tree	[destination]
String length	1 to 128
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

distinguisher *number*

Synopsis	SRv6 policy candidate path distinguisher
Context	ping distinguisher <i>number</i>
Tree	distinguisher
Description	This command specifies the distinguisher of the SRv6 policy candidate path to send the ping probe on. This command must be configured if the protocol-owner command is configured to bgp .
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

do-not-fragment

Synopsis	Do not fragment echo request packets (valid for IPv4)
Context	ping do-not-fragment
Tree	do-not-fragment
Description	This command sets the Do Not Fragment (DF) bit in the IPv4 header. This prevents packet fragmentation along the path when there is an MTU mismatch.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint *ipv6-unicast-or-zero-address*

Synopsis	Endpoint identifier of the Segment Routing IPv6 policy to be pinged
Context	ping endpoint <i>ipv6-unicast-or-zero-address</i>
Tree	endpoint
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class option for the transmitted packet
Context	ping fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	nc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Sending interface name
Context	ping interface (<i>reference</i> <i>reference</i> <i>reference</i> <i>reference</i> <i>reference</i>)
Tree	interface
Reference	state router <i>named-item-64</i> interface <i>interface-name</i> state service ies <i>service-name</i> interface <i>interface-name</i> state service ies <i>service-name</i> <i>interface-name</i> state service vprn <i>service-name</i> interface <i>interface-name</i> state service vprn <i>service-name</i> <i>interface-name</i>

Notes	The following elements are part of a choice: bypass-routing , interface , next-hop-address , or subscriber .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Time between consecutive ping requests
Context	ping interval (<i>number</i> <i>decimal-number</i>)
Tree	interval
Range	1 to 10000
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Next-hop address to send packet, ignoring routing table
Context	ping next-hop-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop-address
Description	This command specifies the next-hop address. The system does not use the routing table and the address must be on an adjacent router attached to a common subnet.
Notes	The following elements are part of a choice: bypass-routing , interface , next-hop-address , or subscriber .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-format *keyword*

Synopsis	Output format
Context	ping output-format <i>keyword</i>
Tree	output-format
Options	summary, detail
Default	detail

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern (*keyword* | *number*)

Synopsis	Pattern string to include in the packet
Context	ping pattern (<i>keyword</i> <i>number</i>)
Tree	pattern
Range	0 to 65535
Options	sequential
Default	sequential
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	SRv6 policy candidate path preference
Context	ping preference <i>number</i>
Tree	preference
Description	This command specifies the preference of the SRv6 policy candidate path to send the ping probe on.
Max. range	0 to 4294967295
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-owner *keyword*

Synopsis	Protocol owner
Context	ping protocol-owner <i>keyword</i>
Tree	protocol-owner
Description	<p>This command specifies the protocol owner of the SRv6 policy candidate path to ping.</p> <p>The bgp option specifies a BGP SRv6 policy.</p> <p>The static option specifies a locally configured static SRv6 policy.</p>
Options	bgp, static

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Router name or VPRN service name
Context	ping router-instance (<i>reference</i> <i>reference</i>)
Tree	router-instance
Default	Base
Reference	state router <i>named-item-64</i> state service vprn <i>service-name</i>
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-list *number*

Synopsis	Segment Routing IPv6 segment list to be pinged
Context	ping segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Request packet size including ICMP header and payload
Context	ping size <i>number</i>
Tree	size
Range	0 to 16384
Units	bytes
Default	56

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address used in the ICMP Echo Request packet
Context	ping source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srv6-policy

Synopsis	Ping a Segment Routing IPv6 policy
Context	ping srv6-policy
Tree	srv6-policy
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subscriber *subscriber-id*

Synopsis	Subscriber ID for sending ICMP Echo Request packets
Context	ping subscriber <i>subscriber-id</i>
Tree	subscriber
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: bypass-routing , interface , next-hop-address , or subscriber .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Wait time for the ICMP Echo Reply packet
Context	ping timeout <i>number</i>
Tree	timeout
Description	This command specifies the time to wait for the ICMP Echo Reply packet. The timer is started when the last ICMP Echo Request is sent.
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tos *number*

Synopsis	Type of Service (ToS) bits in the IP header
Context	ping tos <i>number</i>
Tree	tos
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	Time to Live (TTL) included in the request packet
Context	ping ttl <i>number</i>
Tree	ttl
Range	1 to 128
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pwc

Synopsis	Show the present working context
Context	pwc
Tree	pwc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[path-type] keyword

Synopsis	Alternative format to display the path
Context	pwc [path-type] keyword
Tree	[path-type]
Description	This command provides alternative formats to display the present working context. The gnmi-path option replaces the xpath option.
Options	model-path – YANG-modeled format for RESTCONF gnmi-path – gNMI format for streaming telemetry cli-path – MD-CLI format on a single line for copying and pasting json-instance-path – YANG-modeled format for pySROS
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

previous

Synopsis	Display previous working context
Context	pwc previous
Tree	previous
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pyexec [url] (string | string)

Synopsis	Execute a Python application
Context	pyexec (string string)
Tree	pyexec
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Location of the script to be executed
Context [pyexec](#) (*string* | *string*)
Tree [pyexec](#)
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-01] *string*

Synopsis First argument
Context [pyexec](#) (*string* | *string*) [\[argument-01\]](#) *string*
Tree [\[argument-01\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-02] *string*

Synopsis Second argument
Context [pyexec](#) (*string* | *string*) [\[argument-02\]](#) *string*
Tree [\[argument-02\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-03] *string*

Synopsis Third argument
Context [pyexec](#) (*string* | *string*) [\[argument-03\]](#) *string*
Tree [\[argument-03\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-04] *string*

Synopsis	Fourth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-04] <i>string</i>
Tree	[argument-04]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-05] *string*

Synopsis	Fifth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-05] <i>string</i>
Tree	[argument-05]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-06] *string*

Synopsis	Sixth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-06] <i>string</i>
Tree	[argument-06]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-07] *string*

Synopsis	Seventh argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-07] <i>string</i>
Tree	[argument-07]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-08] *string*

Synopsis	Eight argument
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Context	pyexec (<i>string</i> <i>string</i>) [argument-08] <i>string</i>
Tree	[argument-08]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-09] *string*

Synopsis	Ninth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-09] <i>string</i>
Tree	[argument-09]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-10] *string*

Synopsis	Tenth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-10] <i>string</i>
Tree	[argument-10]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-11] *string*

Synopsis	Eleventh argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-11] <i>string</i>
Tree	[argument-11]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-12] *string*

Synopsis	Twelfth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-12] <i>string</i>
Tree	[argument-12]
Introduced	25.7.R1

Platforms 7705 SAR Gen 2

[argument-13] string

Synopsis Thirteenth argument
Context [pyexec \(string | string\) \[argument-13\] string](#)
Tree [\[argument-13\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-14] string

Synopsis Fourteenth argument
Context [pyexec \(string | string\) \[argument-14\] string](#)
Tree [\[argument-14\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-15] string

Synopsis Fifteenth argument
Context [pyexec \(string | string\) \[argument-15\] string](#)
Tree [\[argument-15\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-16] string

Synopsis Sixteenth argument
Context [pyexec \(string | string\) \[argument-16\] string](#)
Tree [\[argument-16\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-17] string

Synopsis	Seventeenth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-17] <i>string</i>
Tree	[argument-17]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-18] string

Synopsis	Eighteenth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-18] <i>string</i>
Tree	[argument-18]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-19] string

Synopsis	Nineteenth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-19] <i>string</i>
Tree	[argument-19]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-20] string

Synopsis	Twentieth argument
Context	pyexec (<i>string</i> <i>string</i>) [argument-20] <i>string</i>
Tree	[argument-20]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

quit-config

Synopsis	Exit the candidate configuration mode
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Context	quit-config
Tree	quit-config
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh

Synopsis	SSH to an IP address or DNS name
Context	ssh
Tree	ssh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP address or DNS name
Context	ssh [destination] (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>string-not-all-spaces</i>)
Tree	[destination]
String length	1 to 128
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-re-exchange

Synopsis	Enter the key-re-exchange context
Context	ssh key-re-exchange
Tree	key-re-exchange
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbytes (*number* | *keyword*)

Synopsis	Maximum bytes before initiating key re-exchange
Context	ssh key-re-exchange mbytes (<i>number</i> <i>keyword</i>)
Tree	mbytes
Description	This command specifies the number of bytes transmitted on an SSH session, after which the SSH client initiates the key re-exchange.
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minutes (*number* | *keyword*)

Synopsis	Time after which SSH client initiates key re-exchange
Context	ssh key-re-exchange minutes (<i>number</i> <i>keyword</i>)
Tree	minutes
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

login-name *string-not-all-spaces*

Synopsis	SSH login username
Context	ssh login-name <i>string-not-all-spaces</i>
Tree	login-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port number

Synopsis	TCP listening port on SSH client for SSH session
Context	ssh port number
Tree	port
Description	This command configures the listening port for the SR OS SSH client to establish the SSH session with the SSH server.
Range	1 to 65535
Default	22
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private-key-file string

Synopsis	SSH private key file for public-key authentication
Context	ssh private-key-file string
Tree	private-key-file
Description	This command configures the name of the file containing the private key for public-key authentication on the SR OS SSH client, up to 255 characters. (The public key must be provided to the SSH server.) If the file containing the private key is encrypted, the system asks for the password to decrypt the file.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance (string | string)

Synopsis	Router name or VPRN service name
Context	ssh router-instance (string string)
Tree	router-instance
Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet

Synopsis	Telnet to an IP address or DNS name
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Context	telnet
Tree	telnet
Description	This command opens a Telnet session to a remote host. In SR OS, the Telnet servers limit Telnet clients to three login attempts; if unsuccessful, the Telnet client session disconnects. The number is not user configurable.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP address or DNS name
Context	telnet [destination] (<i>ipv4-address-with-zone ipv6-address-with-zone string-not-all-spaces</i>)
Tree	[destination]
Description	This command specifies the IP address or DNS name (if DNS name resolution is configured) of the remote host for the Telnet session.
String length	1 to 128
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port number

Synopsis	Remote host TCP port for the Telnet connection
Context	telnet port <i>number</i>
Tree	port
Range	1 to 65535
Default	23
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance (*string* | *string*)

Synopsis	Router name or VPRN service name
Context	telnet router-instance (<i>string</i> <i>string</i>)
Tree	router-instance
Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address of the Telnet packets
Context	telnet source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

top

Synopsis	Move to the top level of the context
Context	top
Tree	top
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute

Synopsis	Show the route taken to an IP address or DNS name
Context	traceroute
Tree	traceroute
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

candidate-path

Synopsis	Trace route of the candidate path of the SRv6 policy
Context	traceroute candidate-path
Tree	candidate-path
Description	When configured, this command allows the user to specify a candidate path of the SRv6 policy to traceroute. The candidate path does not need to be the currently active candidate path.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color *number*

Synopsis	Color ID of the SRv6 policy to trace
Context	traceroute color <i>number</i>
Tree	color
Description	This command launches a traceroute of an SRv6 policy that matches a specific color.
Max. range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

decode *keyword*

Synopsis	Perform original datagram parsing functions
Context	traceroute decode <i>keyword</i>
Tree	decode
Options	none, original-datagram
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-port *number*

Synopsis	Transport protocol destination port number
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Context	traceroute dest-port <i>number</i>
Tree	dest-port
Range	1 to 65535
Default	33434
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-port-udp-fixed

Synopsis	Avoid increment of destination port number for UDP test
Context	traceroute dest-port-udp-fixed
Tree	dest-port-udp-fixed
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP address or DNS name
Context	traceroute [destination] (<i>ipv4-address-no-zone ipv6-address-no-zone string-not-all-spaces</i>)
Tree	[destination]
String length	1 to 128
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail

Synopsis	Display MPLS label stack information or TCP port status
Context	traceroute detail
Tree	detail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

distinguisher *number*

Synopsis	SRv6 policy candidate path distinguisher
Context	traceroute distinguisher <i>number</i>
Tree	distinguisher
Description	<p>This command specifies the distinguisher of the SRv6 policy candidate path to send the traceroute probe on.</p> <p>This command must be configured if the protocol-owner command is configured to bgp.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint *ipv6-unicast-or-zero-address*

Synopsis	Endpoint of the SRv6 policy to trace
Context	traceroute endpoint <i>ipv6-unicast-or-zero-address</i>
Tree	endpoint
Description	This command configures an IPv6 endpoint address for an SRv6 policy as the target of the traceroute.
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-ttl *number*

Synopsis	First hop traceroute probes using the TTL value
Context	traceroute min-ttl <i>number</i>
Tree	min-ttl
Description	This command specifies the first hop traceroute probes, using the ttl value.
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

numeric

Synopsis	Display IP addresses instead of DNS names
Context	traceroute numeric
Tree	numeric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	SRv6 policy candidate path preference
Context	traceroute preference <i>number</i>
Tree	preference
Description	This command specifies the preference of the SRv6 policy candidate path to send the traceroute probe on.
Max. range	0 to 4294967295
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-count *number*

Synopsis	Number of probes to send per hop
Context	traceroute probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol *keyword*

Synopsis	Packet type to send
Context	traceroute protocol <i>keyword</i>
Tree	protocol

Description	This command sets the transport protocol, UDP or TCP, for the traceroute packet. A targeted VPRN service silently discards TCP traceroutes and only responds to UDP traceroutes.
Options	udp, tcp
Default	udp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-owner *keyword*

Synopsis	Protocol owner
Context	traceroute protocol-owner <i>keyword</i>
Tree	protocol-owner
Description	<p>This command specifies the protocol owner of the SRv6 policy candidate path to traceroute.</p> <p>The bgp option specifies a BGP SRv6 policy.</p> <p>The static option specifies a locally configured static SRv6 policy.</p>
Options	bgp, static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	traceroute router-instance <i>string</i>
Tree	router-instance
Default	Base
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-list *number*

Synopsis	SR IPv6 segment list to trace
Context	traceroute segment-list <i>number</i>

Tree	segment-list
Description	This command configures the traceroute probe to target a specific segment list of an SRv6 policy. When the segment list is not specified, the traceroute probe is sent on the lowest available segment list.
Range	1 to 32
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size number

Synopsis	Number of pad bytes in each transmitted packet
Context	traceroute size number
Tree	size
Range	0 to 9786
Units	bytes
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address of the probe packets
Context	traceroute source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Description	This command specifies the source address of the probe packets. If the IP address is not one of the interfaces of the device, the system returns an error.
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srv6-policy

Synopsis	Trace an SRv6 policy
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Context	traceroute srv6-policy
Tree	srv6-policy
Description	This command launches a traceroute of a Segment Routing IPv6 (SRv6) policy.
Notes	The following elements are part of a mandatory choice: (destination , router-instance , and source-address) or (color , endpoint , segment-list , and srv6-policy).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tos number

Synopsis	Type of Service (ToS) bits in the IP header
Context	traceroute tos number
Tree	tos
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl number

Synopsis	Maximum number of hops (TTL) to probe
Context	traceroute ttl number
Tree	ttl
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wait number

Synopsis	Time to wait for a response to the probe
Context	traceroute wait number
Tree	wait
Range	10 to 60000
Units	milliseconds

Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tree

Synopsis	Show the command tree under the present working context
Context	tree
Tree	tree
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] cli-path-type

Synopsis	Absolute path or relative path from pwc
Context	tree [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

depth number

Synopsis	Depth limit of the tree
Context	tree depth number
Tree	depth
Range	1 to 4294967040
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

detail

Synopsis	Display the tree with keys and field values
Context	tree detail
Tree	detail
Notes	The following elements are part of a choice: (detail and flat) or path-format .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flat

Synopsis	Show the context from the pwc on each line
Context	tree flat
Tree	flat
Notes	The following elements are part of a choice: (detail and flat) or path-format .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[path-format] keyword

Synopsis	Alternative format to display the path
Context	tree [path-format] keyword
Tree	[path-format]
Description	This option outputs the tree information in alternative YANG formats for use in external tools, such as pySROS, gNMI, or the Network Services Platform (NSP).
Options	model-path – YANG-modeled format for RESTCONF gnmi-path – gNMI format for streaming telemetry json-instance-path – YANG-modeled format for pySROS
Notes	The following elements are part of a choice: (detail and flat) or path-format .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

2.5 Output modifier commands

See “Using output modifiers in the MD-CLI” in the *7705 SAR Gen 2 MD-CLI User Guide* for more information.

```

- |
- count
- match string
  - ignore-case boolean
  - invert-match boolean
  - max-count number
  - post-lines number
  - pre-lines number
- no-more
- pyexec (string | reference)
  - [argument-01] string
  - [argument-02] string
  - [argument-03] string
  - [argument-04] string
  - [argument-05] string
  - [argument-06] string
  - [argument-07] string
  - [argument-08] string
  - [argument-09] string
  - [argument-10] string
  - [argument-11] string
  - [argument-12] string
  - [argument-13] string
  - [argument-14] string
  - [argument-15] string
  - [argument-16] string
  - [argument-17] string
  - [argument-18] string
  - [argument-19] string
  - [argument-20] string
- repeat
  - count number
  - [interval] number
  - timestamp
- reverse-dns
- > (cflash-url | ftp-tftp-url)
- >> cflash-url

```


2.5.1 Output modifier command descriptions

|

Synopsis	Apply an output modifier
Context	
Tree	
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count

Synopsis	Show the line count of the output
Context	count
Tree	count
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match [pattern] string

Synopsis	Match on a string (") or regular expression (')
Context	match string
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pattern] string

Synopsis	String (") or regular expression (') pattern to match
Context	match string
Tree	match
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-case *boolean*

Synopsis	Ignore case in pattern match
Context	match <i>string</i> ignore-case <i>boolean</i>
Tree	ignore-case
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

invert-match *boolean*

Synopsis	Invert the pattern match selection
Context	match <i>string</i> invert-match <i>boolean</i>
Tree	invert-match
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-count *number*

Synopsis	Maximum number of displayed matches
Context	match <i>string</i> max-count <i>number</i>
Tree	max-count
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

post-lines *number*

Synopsis	Number of lines to display following the matched line
Context	match <i>string</i> post-lines <i>number</i>
Tree	post-lines
Range	0 to 4294967295
Default	0
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pre-lines *number*

Synopsis Number of lines to display preceding the matched line

Context | [match](#) *string* [pre-lines](#) *number*

Tree [pre-lines](#)

Range 0 to 4294967295

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

no-more

Synopsis Prevent pagination for the displayed output

Context | [no-more](#)

Tree [no-more](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Execute a Python application

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

Tree [pyexec](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Location of the script to be executed

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

Tree [pyexec](#)

Reference **state python python-script name**

Notes This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-01] *string*

Synopsis First argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-01\]](#) *string*
Tree [\[argument-01\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-02] *string*

Synopsis Second argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-02\]](#) *string*
Tree [\[argument-02\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-03] *string*

Synopsis Third argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-03\]](#) *string*
Tree [\[argument-03\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-04] *string*

Synopsis Fourth argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-04\]](#) *string*
Tree [\[argument-04\]](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[argument-05] *string*

Synopsis	Fifth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-05] <i>string</i>
Tree	[argument-05]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-06] *string*

Synopsis	Sixth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-06] <i>string</i>
Tree	[argument-06]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-07] *string*

Synopsis	Seventh argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-07] <i>string</i>
Tree	[argument-07]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-08] *string*

Synopsis	Eight argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-08] <i>string</i>
Tree	[argument-08]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-09] *string*

Synopsis	Ninth argument
----------	----------------

Context	pyexec (<i>string</i> <i>reference</i>) [argument-09] <i>string</i>
Tree	[argument-09]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-10] *string*

Synopsis	Tenth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-10] <i>string</i>
Tree	[argument-10]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[argument-11] *string*

Synopsis	Eleventh argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-11] <i>string</i>
Tree	[argument-11]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-12] *string*

Synopsis	Twelfth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-12] <i>string</i>
Tree	[argument-12]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-13] *string*

Synopsis	Thirteenth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-13] <i>string</i>
Tree	[argument-13]
Introduced	25.7.R1

Platforms 7705 SAR Gen 2

[argument-14] *string*

Synopsis Fourteenth argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-14\]](#) *string*
Tree [\[argument-14\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-15] *string*

Synopsis Fifteenth argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-15\]](#) *string*
Tree [\[argument-15\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-16] *string*

Synopsis Sixteenth argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-16\]](#) *string*
Tree [\[argument-16\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-17] *string*

Synopsis Seventeenth argument
Context [| pyexec](#) (*string* | *reference*) [\[argument-17\]](#) *string*
Tree [\[argument-17\]](#)
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

[argument-18] *string*

Synopsis	Eighteenth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-18] <i>string</i>
Tree	[argument-18]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-19] *string*

Synopsis	Nineteenth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-19] <i>string</i>
Tree	[argument-19]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[argument-20] *string*

Synopsis	Twentieth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-20] <i>string</i>
Tree	[argument-20]
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

repeat

Synopsis	Repeat the command
Context	repeat
Tree	repeat
Description	Commands in this context configure the command to repeat.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count *number*

Synopsis	Command repetition count
Context	repeat count <i>number</i>
Tree	count
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interval] *number*

Synopsis	Command repetition interval
Context	repeat [interval] <i>number</i>
Tree	[interval]
Description	This command configures the command repetition interval. If this command is not specified, the command repeats until interrupted with Ctrl-C.
Range	10 to 86400000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timestamp

Synopsis	Display the timestamp before each repetition
Context	repeat timestamp
Tree	timestamp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reverse-dns

Synopsis	Resolve IP addresses to DNS names in input
Context	reverse-dns
Tree	reverse-dns

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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

Synopsis Redirect output to a file
 Context > (*cflash-url* | *ftp-tftp-url*)
 Tree >
 Introduced 25.3.R4
 Platforms 7705 SAR Gen 2

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

Synopsis Location to save the output
 Context > (*cflash-url* | *ftp-tftp-url*)
 Tree >
 String length 1 to 199
 String format 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
 'cflash-url' must have each path segment at most 99 characters
 'ftp-tftp-url' must be ftp:// or tftp:// with host and path (e.g. ftp://user:pass@hostname.domain/path/file)
 'ftp-tftp-url' must have valid hostname and optional path after scheme
 Notes This element is part of a list key.
 Introduced 25.3.R4
 Platforms 7705 SAR Gen 2

>> [url] *cflash-url*

Synopsis Append output to a local file
 Context >> *cflash-url*
 Tree >>
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[url] *cflash-url*

Synopsis	Local location to append the output
Context	>> <i>cflash-url</i>
Tree	>>
String length	1 to 199
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

2.6 perform commands

The **perform** commands are YANG-modeled versions of the **tools perform** commands and are available in MD-CLI and NETCONF interfaces. The **perform** commands execute actions in the router, such as:

- force a LAG subgroup to become active
- set an IS-IS overload condition
- terminate a Python script

```
perform
- card number
- power-cycle
- chassis reference chassis-number reference
- check-backplane-eprom
- filter
- ip-filter reference
- entry reference
- activate-primary-action
- ipv6-filter reference
- entry reference
- activate-primary-action
- redirect-policy reference
- activate-best-dest
- gnss
- restart-position-survey
- all
- port
- [port] reference
- lag
- clear-force
- lag
- [lag-name] reference
- sub-group number
- multi-chassis
- all
- peer
- [ip-address] reference
- force-active
- lag
- [lag-name] reference
- sub-group number
- multi-chassis
- all
- peer
- [ip-address] reference
- force-standby
- lag
- [lag-name] reference
- sub-group number
- multi-chassis
- all
- peer
- [ip-address] reference
- load-balance
- class number
- [lag-name] reference
- log
- custom-event
- [event-number] number
- message-string string
```

perform log custom-event parameter1

```

- parameter1 string
- parameter2 string
- parameter3 string
- parameter4 string
- parameter5 string
- parameter6 string
- parameter7 string
- parameter8 string
- subject string
- test-event
  - custom-text string
- mda
  - card-slot reference
  - mda-slot reference
    - ptp-reset
- pcap reference
  - capture
    - start
      - timestamp boolean
      - url-suffix string
    - stop
- port reference
  - serial
    - rs232
      - socket reference
        - rx
        - squelch-reset
  - python
    - python-script
      - protect
        - hmac-sha256-key string
        - input-file string
        - output-file string
      - reload
      - script
        - [name] reference
- router string
  - isis reference
    - ldp-sync-exit
    - overload
      - max-metric boolean
      - [seconds] number
    - run-manual-spf
  - mcast-umh-red
    - show
      - pair
        - card number
        - pair-id number
      - summary
  - pim
    - mc-ecmp-rebalance
    - threshold number
    - show
      - iom-failures
        - detail boolean
- service
  - cpipe reference
  - sap reference
    - cem
      - asym-delay-adjust
  - ies reference
    - ip-transport reference
    - remote-host reference
    - check-tcp

```

perform service vpn

- **vpn** *reference*
 - **ip-transport** *reference*
 - **remote-host** *reference*
 - **check-tcp**
 - **mvpn**
- **system**
 - **grpc**
 - **custom-proto** *reference*
 - **reload**
 - **script-control**
 - **script-policy**
 - **stop**
 - **all**
 - **owner** *reference*
 - **policy-name** *reference*
- **security**
 - **secure-boot**
 - **show**
 - **uefi-variables**
 - **card** *reference*
 - **tpm**
 - **show**
 - **certificates**
 - **card** *reference*
 - **detail**
- **ssh**
 - **client-known-hosts**
 - **remove-key**
 - **all-hosts**
 - **all-users**
 - **host** *reference*
 - **user** *reference*
 - **remove-my-key**
 - **all-hosts**
 - **host** *reference*
 - **generate-keypair**
 - **ecdsa-curve** *keyword*
 - **ed25519**
 - **rsa-key-size** *number*
 - **[save-path]** *cflash-url*

2.6.1 perform command descriptions

perform

Synopsis	Perform troubleshooting and debugging
Context	perform
Tree	perform
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card [[slot-number](#)] *number*

Synopsis	Enter the card list instance
Context	perform card <i>number</i>
Tree	card
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[slot-number\]](#) *number*

Synopsis	Card slot number
Context	perform card <i>number</i>
Tree	card
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

power-cycle

Synopsis	Force a power cycle of a card
Context	perform card <i>number</i> power-cycle
Tree	power-cycle
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

chassis [[chassis-class](#)] *reference* [chassis-number](#) *reference*

Synopsis Enter the **chassis** list instance

Context [perform chassis](#) *reference* [chassis-number](#) *reference*

Tree [chassis](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[chassis-class] *reference*

Synopsis Physical chassis

Context [perform chassis](#) *reference* [chassis-number](#) *reference*

Tree [chassis](#)

Reference **state chassis** *keyword chassis-number number*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

chassis-number *reference*

Synopsis Unique index ID for the physical chassis

Context [perform chassis](#) *reference* [chassis-number](#) *reference*

Tree [chassis](#)

Reference **state chassis** *keyword chassis-number number*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

check-backplane-eprom

Synopsis Check chassis backplane EPROM

Context [perform chassis](#) *reference* [chassis-number](#) *reference* [check-backplane-eprom](#)

Tree [check-backplane-eprom](#)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	perform filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-filter [\[filter-name\]](#) *reference*

Synopsis	Enter the ip-filter list instance
Context	perform filter ip-filter reference
Tree	ip-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *reference*

Synopsis	Name to associate with the IP filter
Context	perform filter ip-filter reference
Tree	ip-filter
Reference	state filter ip-filter <i>filter-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the entry list instance
Context	perform filter ip-filter reference entry reference
Tree	entry
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[entry-id] *reference*

Synopsis ID for the IP filter entry

Context [perform filter ip-filter reference entry reference](#)

Tree [entry](#)

Reference **state filter ip-filter filter-name entry number**

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

activate-primary-action

Synopsis Switch from the secondary to the primary action

Context [perform filter ip-filter reference entry reference activate-primary-action](#)

Tree [activate-primary-action](#)

Description This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the **configure filter redirect sticky-dest** command is configured, the timer expires.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6-filter [\[filter-name\]](#) *reference*

Synopsis Enter the **ipv6-filter** list instance

Context [perform filter ipv6-filter reference](#)

Tree [ipv6-filter](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[filter-name] *reference*

Synopsis Name to associate with the IPv6 filter

Context [perform filter ipv6-filter reference](#)

Tree	ipv6-filter
Reference	state filter ipv6-filter <i>filter-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *reference*

Synopsis	Enter the entry list instance
Context	perform filter ipv6-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *reference*

Synopsis	ID for the IPv6 filter entry
Context	perform filter ipv6-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Reference	state filter ipv6-filter <i>filter-name</i> entry <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activate-primary-action

Synopsis	Switch from the secondary to the primary action
Context	perform filter ipv6-filter <i>reference</i> entry <i>reference</i> activate-primary-action
Tree	activate-primary-action
Description	This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the configure filter redirect sticky-dest command is configured, the timer expires.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-policy [[redirect-policy-name](#)] *reference*

Synopsis	Enter the redirect-policy list instance
Context	perform filter redirect-policy <i>reference</i>
Tree	redirect-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[redirect-policy-name] *reference*

Synopsis	Name of the redirect policy
Context	perform filter redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	state filter redirect-policy <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activate-best-dest

Synopsis	Activate the current best destination
Context	perform filter redirect-policy <i>reference</i> activate-best-dest
Tree	activate-best-dest
Description	This command forces a PBR switch to the best destination selected by the redirect policy when that destination is not currently active as result of sticky destination functionality being enabled for the specified redirect policy. If the configure filter redirect sticky-dest command is configured, the timer expires.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnss

Synopsis	Enter the gnss context
Context	perform gnss
Tree	gnss
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

restart-position-survey

Synopsis Enter the **restart-position-survey** context

Context [perform gnss restart-position-survey](#)

Tree [restart-position-survey](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

all

Synopsis Restart the GNSS position survey on all GNSS ports

Context [perform gnss restart-position-survey all](#)

Tree [all](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port

Synopsis Restart the position survey on the specified GNSS port

Context [perform gnss restart-position-survey port](#)

Tree [port](#)

Description This command performs a restart of the GNSS position survey on the specified GNSS port.

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[port] reference

Synopsis GNSS port for the GNSS position survey

Context [perform gnss restart-position-survey port \[port\] reference](#)

Tree [\[port\]](#)

Reference **state port port**

Notes This element is mandatory.

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

lag

Synopsis	Enter the lag context
Context	perform lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-force

Synopsis	Enter the clear-force context
Context	perform lag clear-force
Tree	clear-force
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Perform LAG operation on the specified LAG
Context	perform lag clear-force lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] reference

Synopsis	LAG name
Context	perform lag clear-force lag [lag-name] reference
Tree	[lag-name]
Reference	state lag lag-interface
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sub-group *number*

Synopsis Sub-group in the LAG

Context [perform lag clear-force lag sub-group *number*](#)

Tree [sub-group](#)

Range 1 to 16

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

multi-chassis

Synopsis Enter the **multi-chassis** context

Context [perform lag clear-force multi-chassis](#)

Tree [multi-chassis](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Perform LAG operation on all multi-chassis LAGs

Context [perform lag clear-force multi-chassis all](#)

Tree [all](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

peer

Synopsis Perform LAG operation on the MC peer

Context [perform lag clear-force multi-chassis peer](#)

Tree [peer](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-address] reference

Synopsis	Peer IP address
Context	perform lag clear-force multi-chassis peer [ip-address] reference
Tree	[ip-address]
Reference	state redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-active

Synopsis	Enter the force-active context
Context	perform lag force-active
Tree	force-active
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Perform LAG operation on the specified LAG
Context	perform lag force-active lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] reference

Synopsis	LAG name
Context	perform lag force-active lag [lag-name] reference
Tree	[lag-name]
Reference	state lag lag-interface
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sub-group *number*

Synopsis Sub-group in the LAG
Context [perform lag force-active lag sub-group *number*](#)
Tree [sub-group](#)
Range 1 to 16
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

multi-chassis

Synopsis Enter the **multi-chassis** context
Context [perform lag force-active multi-chassis](#)
Tree [multi-chassis](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

all

Synopsis Perform LAG operation on all multi-chassis LAGs
Context [perform lag force-active multi-chassis all](#)
Tree [all](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

peer

Synopsis Perform LAG operation on the MC peer
Context [perform lag force-active multi-chassis peer](#)
Tree [peer](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[ip-address] reference

Synopsis	Peer IP address
Context	perform lag force-active multi-chassis peer [ip-address] reference
Tree	[ip-address]
Reference	state redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-standby

Synopsis	Enter the force-standby context
Context	perform lag force-standby
Tree	force-standby
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Perform LAG operation on the specified LAG
Context	perform lag force-standby lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] reference

Synopsis	LAG name
Context	perform lag force-standby lag [lag-name] reference
Tree	[lag-name]
Reference	state lag lag-interface
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sub-group *number*

Synopsis Sub-group in the LAG
Context [perform lag force-standby lag sub-group *number*](#)
Tree [sub-group](#)
Range 1 to 16
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

multi-chassis

Synopsis Enter the **multi-chassis** context
Context [perform lag force-standby multi-chassis](#)
Tree [multi-chassis](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

all

Synopsis Perform LAG operation on all multi-chassis LAGs
Context [perform lag force-standby multi-chassis all](#)
Tree [all](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

peer

Synopsis Perform LAG operation on the MC peer
Context [perform lag force-standby multi-chassis peer](#)
Tree [peer](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[ip-address] reference

Synopsis	Peer IP address
Context	perform lag force-standby multi-chassis peer [ip-address] reference
Tree	[ip-address]
Reference	state redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balance

Synopsis	Perform LAG load-balance operation
Context	perform lag load-balance
Tree	load-balance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class number

Synopsis	Class used for load balancing
Context	perform lag load-balance class number
Tree	class
Range	1 to 3
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] reference

Synopsis	LAG name
Context	perform lag load-balance [lag-name] reference
Tree	[lag-name]
Reference	state lag <i>lag-interface</i>

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log

Synopsis	Enter the log context
Context	perform log
Tree	log
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

custom-event

Synopsis	Send a custom generic log event
Context	perform log custom-event
Tree	custom-event
Description	When specified, the system sends a custom generic log event. The total length of the message string and all parameter strings must be less than or equal to 2400 characters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[event-number] *number*

Synopsis	Custom event to send
Context	perform log custom-event [event-number] <i>number</i>
Tree	[event-number]
Range	1 to 6
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-string *string*

Synopsis	Message for the log event
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Context	perform log custom-event message-string <i>string</i>
Tree	message-string
Description	This command specifies the string for the message field of the log event. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	1 to 2000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter1 *string*

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter1 <i>string</i>
Tree	parameter1
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter2 *string*

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter2 <i>string</i>
Tree	parameter2
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter3 string

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter3 string
Tree	parameter3
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter4 string

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter4 string
Tree	parameter4
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter5 string

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter5 string
Tree	parameter5
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter6 *string*

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter6 <i>string</i>
Tree	parameter6
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter7 *string*

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter7 <i>string</i>
Tree	parameter7
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parameter8 *string*

Synopsis	Custom text of the parameter
Context	perform log custom-event parameter8 <i>string</i>
Tree	parameter8
Description	This command specifies the string for the parameter. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	0 to 2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject *string*

Synopsis	Subject of the log event
Context	perform log custom-event subject <i>string</i>
Tree	subject
Description	This command specifies the string in the subject field of the log event. Embedded double quotes are supported by using the backslash character (\) followed by the double quote character (").
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-event

Synopsis	Send a test log event
Context	perform log test-event
Tree	test-event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

custom-text *string*

Synopsis	Custom text of the test event message field
Context	perform log test-event custom-text <i>string</i>
Tree	custom-text
Description	This command specifies custom text for the message section of the test log event. Embedded double quotes are not supported in the custom-text string. There is no special treatment for or \r sequences. For example, in the custom-text string is output as the backslash character (\) and "n" (the equivalent of ASCII 0x5C and 0x6e).
String length	0 to 800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mda

Synopsis	Enter the mda context
Context	perform mda
Tree	mda
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

card-slot [[slot-number](#)] *reference*

Synopsis	Enter the card-slot list instance
Context	perform mda card-slot reference
Tree	card-slot
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[[slot-number](#)] *reference*

Synopsis	Card slot number
Context	perform mda card-slot reference
Tree	card-slot
Reference	state card number
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mda-slot [[mda](#)] *reference*

Synopsis	Enter the mda-slot list instance
Context	perform mda card-slot reference mda-slot reference
Tree	mda-slot
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[mda] reference

Synopsis	Card MDA slot
Context	perform mda card-slot <i>reference mda-slot reference</i>
Tree	mda-slot
Reference	state card number mda number
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ptp-reset

Synopsis	Reset the PTP timing on the specified MDA
Context	perform mda card-slot <i>reference mda-slot reference ptp-reset</i>
Tree	ptp-reset
Description	<p>This command resets the PTP timing subsystem on the specified MDA.</p> <p>When a PTP timeReceiver port indicates abnormal or extreme values for the offset FromMaster or the meanPathDelay, it may be because of the PTP timing subsystem of the MDA on the timeTransmitter or the timeReceiver. This command can be used to reinitialize the timing subsystem on an MDA without impacting traffic.</p> <p>Note: While this command can be used to remedy such a situation, Nokia recommends to first capture any relevant debug files for Nokia investigation.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

pcap [session-name] reference

Synopsis	Enter the pcap list instance
Context	perform pcap <i>reference</i>
Tree	pcap
Description	Commands in this context configure a PCAP instance used for packet capture.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[session-name] reference

Synopsis	PCAP session name for the packet capture
Context	perform pcap reference
Tree	pcap
Reference	state mirror mirror-dest service-name pcap named-item
Notes	This element is part of a list key.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

capture

Synopsis	Enter the capture context
Context	perform pcap reference capture
Tree	capture
Description	Commands in this context configure the packet capture process for a specified PCAP session.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

start

Synopsis	Start PCAP capture
Context	perform pcap reference capture start
Tree	start
Description	When specified, the system starts the packet capture process and also starts the FTP or TFTP session. If the FTP or TFTP server is unreachable, the command prompt rejects further input until the retry mechanism times out after 24 seconds (four attempts of about six seconds each). If the filename (configured using the configure mirror mirror-dest pcap command) is unchanged between captures, this command overwrites the file content. To avoid this, configure the url-suffix option, the timestamp option, or both, to create a new filename when starting a capture.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

timestamp *boolean*

Synopsis	Add a timestamp to the PCAP capture filename
Context	perform pcap <i>reference</i> capture start timestamp <i>boolean</i>
Tree	timestamp
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

url-suffix *string*

Synopsis	pcap capture filename suffix
Context	perform pcap <i>reference</i> capture start url-suffix <i>string</i>
Tree	url-suffix
String length	1 to 19
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

stop

Synopsis	Stop PCAP capture
Context	perform pcap <i>reference</i> capture stop
Tree	stop
Description	When specified, the system stops the packet capture process and also stops the FTP or TFTP session. If the FTP or TFTP server is unreachable, the command prompt rejects further input until the retry mechanism times out after 24 seconds (four attempts of about six seconds each).
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

port [[port-id](#)] *reference*

Synopsis	Enter the port list instance
Context	perform port <i>reference</i>
Tree	port
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[port-id] *reference*

Synopsis The port identifier

Context [perform port reference](#)

Tree [port](#)

Reference **state port port**

Notes This element is part of a list key.

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

serial

Synopsis Enter the **serial** context

Context [perform port reference serial](#)

Tree [serial](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rs232

Synopsis Enter the **rs232** context

Context [perform port reference serial rs232](#)

Tree [rs232](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

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

Synopsis Enter the **socket** list instance

Context [perform port reference serial rs232 socket reference](#)

Tree [socket](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[socket-id] reference

Synopsis	The socket identifier
Context	perform port reference serial rs232 socket reference
Tree	socket
Reference	state port port serial rs232 socket number
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rx

Synopsis	Enter the rx context
Context	perform port reference serial rs232 socket reference rx
Tree	rx
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

squelch-reset

Synopsis	Reset squelch
Context	perform port reference serial rs232 socket reference rx squelch-reset
Tree	squelch-reset
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

python

Synopsis	Enter the python context
Context	perform python
Tree	python
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

python-script

Synopsis	Enter the python-script context
Context	perform python python-script
Tree	python-script
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

protect

Synopsis	Convert a Python file into a protected SRPY format
Context	perform python python-script protect
Tree	protect
Description	When invoked, the system converts a normal (unprotected) Python script file into a protected SRPY format using a specified key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

hmac-sha256-key *string*

Synopsis	Key used to compute the hash
Context	perform python python-script protect hmac-sha256-key <i>string</i>
Tree	hmac-sha256-key
String length	1 to 128
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

input-file *string*

Synopsis	URL of the input unprotected script file
Context	perform python python-script protect input-file <i>string</i>
Tree	input-file
String length	1 to 180
Notes	This element is mandatory.

Introduced	26.7.R1
Platforms	7705 SAR Gen 2

output-file *string*

Synopsis	URL of the output protected script file
Context	perform python python-script protect output-file <i>string</i>
Tree	output-file
String length	1 to 180
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

reload

Synopsis	Enter the reload context
Context	perform python python-script reload
Tree	reload
Description	<p>Commands in this context reload and recompile the primary, secondary, and tertiary scripts in the specified Python scripts, in that order. The system uses the first script that comes up.</p> <p>Executing these commands may update the last modified time for the system configuration.</p>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script

Synopsis	Reload and recompile the specified script
Context	perform python python-script reload script
Tree	script
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[name] reference

Synopsis	Name of the python script to reload
Context	perform python python-script reload script [name] reference
Tree	[name]
Reference	state python python-script <i>named-item</i>
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

router [router-instance] string

Synopsis	Enter the router list instance
Context	perform router string
Tree	router
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-instance] string

Synopsis	Router name or VPRN service name
Context	perform router string
Tree	router
MD-CLI default	Base
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

isis [isis-instance] reference

Synopsis	Enter the isis list instance
Context	perform router string isis reference
Tree	isis
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[isis-instance] reference

Synopsis IS-IS instance

Context [perform router string isis reference](#)

Tree [isis](#)

MD-CLI
default 0

Reference **state router** *named-item-64 isis number*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ldp-sync-exit

Synopsis Terminate LDP synchronization and restore actual cost

Context [perform router string isis reference ldp-sync-exit](#)

Tree [ldp-sync-exit](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

overload

Synopsis Perform IS-IS overload

Context [perform router string isis reference overload](#)

Tree [overload](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-metric boolean

Synopsis Enable advertising max-metric values

Context [perform router string isis reference overload max-metric boolean](#)

Tree [max-metric](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[seconds] *number*

Synopsis	Overload duration
Context	perform router string isis reference overload [seconds] number
Tree	[seconds]
Range	60 to 1800
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

run-manual-spf

Synopsis	Run SPF algorithm
Context	perform router string isis reference run-manual-spf
Tree	run-manual-spf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-umh-red

Synopsis	Enter the mcast-umh-red context
Context	perform router string mcast-umh-red
Tree	mcast-umh-red
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	perform router string mcast-umh-red show
Tree	show

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pair

Synopsis	Enter the pair context
Context	perform router <i>string</i> mcast-umh-red show pair
Tree	pair
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card number

Synopsis	Slot number
Context	perform router <i>string</i> mcast-umh-red show pair card <i>number</i>
Tree	card
Max. range	0 to 4294967295
Notes	The following elements are part of a choice: card , pair-id , or summary .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pair-id number

Synopsis	Pair ID
Context	perform router <i>string</i> mcast-umh-red show pair pair-id <i>number</i>
Tree	pair-id
Range	1 to 1000
Notes	The following elements are part of a choice: card , pair-id , or summary .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary

Synopsis	Summary
Context	perform router <i>string</i> mcast-umh-red show pair summary

Tree	summary
Notes	The following elements are part of a choice: card , pair-id , or summary .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enter the pim context
Context	perform router string pim
Tree	pim
Description	Commands in this context enable tools to perform PIM tasks.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-ecmp-rebalance

Synopsis	Perform multicast ECMP rebalance
Context	perform router string pim mc-ecmp-rebalance
Tree	mc-ecmp-rebalance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	ECMP preference level threshold
Context	perform router string pim mc-ecmp-rebalance threshold number
Tree	threshold
Description	This command configures a threshold level to force a rebalance of all multicast streams with a priority of less than or equal to the specified value. Selecting the highest value forces the rebalance of all multicast streams.
Range	1 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	perform router string pim show
Tree	show
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

iom-failures

Synopsis	Display IOM failures
Context	perform router string pim show iom-failures
Tree	iom-failures
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Display IOM failure details
Context	perform router string pim show iom-failures detail boolean
Tree	detail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service

Synopsis	Enter the service context
Context	perform service
Tree	service
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

cpipe [[service-name](#)] *reference*

Synopsis	Enter the cpipe list instance
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Context	perform service cpipe reference
Tree	cpipe
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[service-name] reference

Synopsis	Name of Cpipe service to perform actions on
Context	perform service cpipe reference
Tree	cpipe
Reference	state service cpipe service-name
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sap [[sap-id](#)] reference

Synopsis	Enter the sap list instance
Context	perform service cpipe reference sap reference
Tree	sap
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[sap-id] reference

Synopsis	SAP ID
Context	perform service cpipe reference sap reference
Tree	sap
Reference	state service cpipe service-name sap sap
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

cem

Synopsis	Enter the cem context
Context	perform service cpipe <i>reference</i> sap <i>reference</i> cem
Tree	cem
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

asym-delay-adjust

Synopsis	Perform asym-delay-adjustment action
Context	perform service cpipe <i>reference</i> sap <i>reference</i> cem asym-delay-adjust
Tree	asym-delay-adjust
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ies [[service-name](#)] *reference*

Synopsis	Enter the ies list instance
Context	perform service ies <i>reference</i>
Tree	ies
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[service-name] *reference*

Synopsis	IES service to perform actions on
Context	perform service ies <i>reference</i>
Tree	ies
Reference	state service ies <i>service-name</i>
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ip-transport [[ipt-id](#)] *reference*

Synopsis	Enter the ip-transport list instance
Context	perform service ies <i>reference</i> ip-transport <i>reference</i>
Tree	ip-transport
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ipt-id] *reference*

Synopsis	The id of the ip-transport to perform actions on
Context	perform service ies <i>reference</i> ip-transport <i>reference</i>
Tree	ip-transport
Reference	state service ies <i>service-name</i> ip-transport <i>port</i>
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-host [[remote-host-id](#)] *reference*

Synopsis	Enter the remote-host list instance
Context	perform service ies <i>reference</i> ip-transport <i>reference</i> remote-host <i>reference</i>
Tree	remote-host
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[remote-host-id] *reference*

Synopsis	The id of the remote-host to perform actions on
Context	perform service ies <i>reference</i> ip-transport <i>reference</i> remote-host <i>reference</i>
Tree	remote-host
Reference	state service ies <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i>
Notes	This element is part of a list key.
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

check-tcp

Synopsis Initiate a check TCP connection test.

Context [perform service ies](#) *reference* [ip-transport](#) *reference* [remote-host](#) *reference* [check-tcp](#)

Tree [check-tcp](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

vprn [[service-name](#)] *reference*

Synopsis Enter the **vprn** list instance

Context [perform service vprn](#) *reference*

Tree [vprn](#)

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

[[service-name](#)] *reference*

Synopsis VPRN service to perform actions on

Context [perform service vprn](#) *reference*

Tree [vprn](#)

Reference **state service vprn** *service-name*

Notes This element is part of a list key.

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

ip-transport [[ipt-id](#)] *reference*

Synopsis Enter the **ip-transport** list instance

Context [perform service vprn](#) *reference* [ip-transport](#) *reference*

Tree [ip-transport](#)

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ipt-id] reference

Synopsis	The id of the ip-transport to perform actions on
Context	perform service vprn reference ip-transport reference
Tree	ip-transport
Reference	state service vprn service-name ip-transport port
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-host [[remote-host-id](#)] reference

Synopsis	Enter the remote-host list instance
Context	perform service vprn reference ip-transport reference remote-host reference
Tree	remote-host
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[[remote-host-id](#)] reference

Synopsis	The id of the remote-host to perform actions on
Context	perform service vprn reference ip-transport reference remote-host reference
Tree	remote-host
Reference	state service vprn service-name ip-transport port remote-host number
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

check-tcp

Synopsis	Initiate a check TCP connection test.
Context	perform service vprn reference ip-transport reference remote-host reference check-tcp
Tree	check-tcp
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mvpn

Synopsis Enter the **mvpn** context
Context [perform service vprn reference mvpn](#)
Tree [mvpn](#)
Introduced 26.10.R1
Platforms 7705 SAR Gen 2

system

Synopsis Enter the **system** context
Context [perform system](#)
Tree [system](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

grpc

Synopsis Enter the **grpc** context
Context [perform system grpc](#)
Tree [grpc](#)
Introduced 26.7.R1
Platforms 7705 SAR Gen 2

custom-proto [\[name\]](#) *reference*

Synopsis Enter the **custom-proto** list instance
Context [perform system grpc custom-proto reference](#)
Tree [custom-proto](#)
Introduced 26.7.R1
Platforms 7705 SAR Gen 2

[name] reference

Synopsis	Customized proto name
Context	perform system grpc custom-proto <i>reference</i>
Tree	custom-proto
Reference	state system grpc custom-proto <i>named-item</i>
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

reload

Synopsis	Reload customized proto file
Context	perform system grpc custom-proto <i>reference</i> reload
Tree	reload
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-control

Synopsis	Enter the script-control context
Context	perform system script-control
Tree	script-control
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script-policy

Synopsis	Enter the script-policy context
Context	perform system script-control script-policy
Tree	script-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stop

Synopsis	Stop the execution of scripts
Context	perform system script-control script-policy stop
Tree	stop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Stop script execution for all script policies
Context	perform system script-control script-policy stop all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (owner and policy-name).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner reference

Synopsis	Stop script execution for a specific owner
Context	perform system script-control script-policy stop owner reference
Tree	owner
Default	TIMOS CLI
Reference	state system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Notes	The following elements are part of a mandatory choice: all or (owner and policy-name).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name reference

Synopsis	Stop script execution for a specific policy
Context	perform system script-control script-policy stop policy-name reference
Tree	policy-name
Reference	state system script-control script-policy <i>named-item</i> owner <i>named-item</i>

Notes	The following elements are part of a mandatory choice: all or (owner and policy-name).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security

Synopsis	Enter the security context
Context	perform system security
Tree	security
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secure-boot

Synopsis	Enter the secure-boot context
Context	perform system security secure-boot
Tree	secure-boot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	perform system security secure-boot show
Tree	show
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uefi-variables

Synopsis	Display secure-boot UEFI variables
Context	perform system security secure-boot show uefi-variables
Tree	uefi-variables
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card reference

Synopsis	CPM slot where UEFI variables are returned
Context	perform system security secure-boot show uefi-variables card <i>reference</i>
Tree	card
Reference	state cpm cpm-card-slot
Notes	The following elements are part of a mandatory choice: card or ethernet-satellite .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tpm

Synopsis	Enter the tpm context
Context	perform system security tpm
Tree	tpm
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

show

Synopsis	Enter the show context
Context	perform system security tpm show
Tree	show
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

certificates

Synopsis	Display TPM certificates
Context	perform system security tpm show certificates
Tree	certificates
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

card reference

Synopsis	CPM slot for which TPM certificates should be returned
Context	perform system security tpm show certificates card <i>reference</i>
Tree	card
Reference	state cpm cpm-card-slot
Notes	This element is mandatory.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

detail

Synopsis	Include DER encoded full certificate in output
Context	perform system security tpm show certificates detail
Tree	detail
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

ssh

Synopsis	Enter the ssh context
Context	perform system ssh
Tree	ssh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-known-hosts

Synopsis	Enter the client-known-hosts context
Context	perform system ssh client-known-hosts
Tree	client-known-hosts
Description	Commands in this context remove dynamically learned SSH host public keys. Known-host keys are stored per user.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

remove-key

Synopsis	Remove dynamically learned SSH host public keys
Context	perform system ssh client-known-hosts remove-key
Tree	remove-key
Description	<p>When invoked, the router removes dynamically learned SSH host public keys for a specified user or for all users. This operation does not remove statically configured known-host keys.</p> <p>Note: Restrict this command to administrative users by using user profiles.</p>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

all-hosts

Synopsis	Remove keys for all hosts
Context	perform system ssh client-known-hosts remove-key all-hosts
Tree	all-hosts
Description	When specified, the router removes dynamically learned host keys for all hosts.
Notes	The following elements are part of a mandatory choice: all-hosts or host .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

all-users

Synopsis	Remove keys for all users
Context	perform system ssh client-known-hosts remove-key all-users
Tree	all-users
Description	When specified, the router removes dynamically learned host keys for all users.
Notes	The following elements are part of a mandatory choice: all-users or user .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

host reference

Synopsis	IP address or FQDN of the host
----------	--------------------------------

Context	perform system ssh client-known-hosts remove-key host reference
Tree	host
Reference	state system security ssh client-known-hosts user <i>named-item</i> host <i>string-not-all-spaces</i>
Notes	The following elements are part of a mandatory choice: all-hosts or host .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

user reference

Synopsis	Specifies the name of a user
Context	perform system ssh client-known-hosts remove-key user reference
Tree	user
Reference	state system security ssh client-known-hosts user <i>named-item</i>
Notes	The following elements are part of a mandatory choice: all-users or user .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

remove-my-key

Synopsis	Remove dynamically learned SSH host public keys
Context	perform system ssh client-known-hosts remove-my-key
Tree	remove-my-key
Description	When invoked, the router removes dynamically learned SSH host public keys for the user whoexecutes the command. This operation does not remove statically configured known-host keys.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

all-hosts

Synopsis	Remove keys for all hosts
Context	perform system ssh client-known-hosts remove-my-key all-hosts
Tree	all-hosts
Description	When specified, the router removes dynamically learned host keys for all hosts for the user whoexecutes the command.

Notes	The following elements are part of a mandatory choice: all-hosts or host .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

host *reference*

Synopsis	IP address or FQDN of the host
Context	perform system ssh client-known-hosts remove-my-key host <i>reference</i>
Tree	host
Reference	state system ssh client-known-hosts host <i>string-not-all-spaces</i>
Notes	The following elements are part of a mandatory choice: all-hosts or host .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

generate-keypair

Synopsis	Generate SSH authentication key pair
Context	perform system ssh generate-keypair
Tree	generate-keypair
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecdsa-curve *keyword*

Synopsis	Elliptic curve of the ECDSA key to be generated
Context	perform system ssh generate-keypair ecdsa-curve <i>keyword</i>
Tree	ecdsa-curve
Options	secp256r1, secp384r1, secp521r1
Default	secp256r1
Notes	The following elements are part of a mandatory choice: ecdsa-curve , ed25519 , or rsa-key-size .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ed25519

Synopsis	Generate an ed25519 key
Context	perform system ssh generate-keypair ed25519
Tree	ed25519
Notes	The following elements are part of a mandatory choice: ecdsa-curve , ed25519 , or rsa-key-size .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsa-key-size *number*

Synopsis	Length in bits of the RSA key to be generated
Context	perform system ssh generate-keypair rsa-key-size number
Tree	rsa-key-size
Range	2048 to 4096
Default	3072
Notes	The following elements are part of a mandatory choice: ecdsa-curve , ed25519 , or rsa-key-size .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[save-path] *cflash-url*

Synopsis	Path to save the result key file
Context	perform system ssh generate-keypair [save-path] cflash-url
Tree	[save-path]
String length	1 to 200
String format	'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path) 'cflash-url' must have each path segment at most 99 characters
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

2.7 reset commands

The **reset** commands are YANG-modeled versions of the **clear** commands and are available in MD-CLI and NETCONF interfaces. The **reset** commands are primarily used to:

- set statistics in a specific area back to a value of zero
- reset specific hardware assemblies, for example, cards
- delete temporary operational state data, for example, contents of a log in memory

```

reset
- card reference
- fp reference
  - distributed-cpu-protection
  - information
  - forward-engine-drop-reason
  - statistics
  - ingress
  - per-egress-fp-statistics
  - queue-group
    - statistics
      - instance number
      - mode keyword
      - queue-group-name string
- reinitialize
  - hard-reset-unsupported-mdas
  - soft
- filter
  - ip-exception
    - direction keyword
    - entry reference
    - [filter-name] reference
  - ip-filter
    - direction keyword
    - entry reference
    - [filter-name] reference
  - ipv6-exception
    - direction keyword
    - entry reference
    - [filter-name] reference
  - ipv6-filter
    - direction keyword
    - entry reference
    - [filter-name] reference
- log
  - [log-id] reference
- policer reference
  - instance
    - all
      - direction keyword
    - filter
      - ip
        - direction keyword
        - [name] reference
      - ipv6
        - direction keyword
        - [name] reference
    - system
      - direction keyword
- lag reference
  - aggregate-queue-statistics

```


reset lag bfd-session

```

- bfd-session
- port
  - family keyword
  - [lag-port] reference
- lacp-statistics
- statistics
- log
- event-handling
  - handlers
    - all
    - handler
      - [name] reference
  - information
- log-events
  - repeating-events
  - all
- log-id
  - [name] reference
- mda
  - card-slot reference
  - mda-slot reference
    - ipsec-statistics
    - reinitialize
- router string
- arp
  - address
    - ipv4-address ipv4-address
  - all
  - interface
    - interface-name interface-name
- bfd
  - session
    - lsp-ldp
      - head
        - session-key
          - prefix (ipv4-prefix | ipv6-prefix)
          - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - tail
        - session-key
          - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
          - prefix (ipv4-prefix | ipv6-prefix)
    - lsp-rsvp
      - head
        - rsvp-session-name
          - rsvp-session-name string-not-all-spaces
        - session-key
          - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
          - lsp-id number
          - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
          - tunnel-id number
      - tail
        - rsvp-session-name
          - rsvp-session-name string-not-all-spaces
          - sender-ip (ipv4-address-no-zone | ipv6-address-no-zone)
        - session-key
          - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
          - lsp-id number
          - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
          - tunnel-id number
    - mpls-tp
      - lsp-id
        - lsp-name string-not-all-spaces
        - path keyword
  - point-to-multipoint

```

reset router bfd session point-to-multipoint p2mp-interface-name

```

- p2mp-interface-name
  - [p2mp-interface-name] string
- point-to-point
  - session-key
    - dst (ipv4-address-no-zone | ipv6-address-no-zone)
    - src (ipv4-address-no-zone | ipv6-address-no-zone)
- seamless-lsp-path
  - all
  - session-key
    - lsp-index number
    - path-lspid number
    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- seamless-sr-policy
  - all
  - session-key
    - lsp-index number
    - path-lspid number
    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- statistics
- lsp-ldp
  - head
    - session-key
      - prefix (ipv4-prefix | ipv6-prefix)
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - tail
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix (ipv4-prefix | ipv6-prefix)
- lsp-rsvp
  - head
    - rsvp-session-name
    - rsvp-session-name string-not-all-spaces
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - lsp-id number
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - tunnel-id number
  - tail
    - rsvp-session-name
    - rsvp-session-name string-not-all-spaces
    - sender-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - lsp-id number
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - tunnel-id number
- mpls-tp
  - lsp-id
    - lsp-name string-not-all-spaces
    - path keyword
- point-to-multipoint
  - p2mp-interface-name
    - [p2mp-interface-name] string
- point-to-point
  - session-key
    - dst (ipv4-address-no-zone | ipv6-address-no-zone)
    - src (ipv4-address-no-zone | ipv6-address-no-zone)
- seamless-lsp-path
  - all
  - session-key
    - lsp-index number
    - path-lspid number

```

reset router bfd statistics seamless-lsp-path session-key prefix

```

    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - seamless-sr-policy
    - all
    - session-key
      - lsp-index number
      - path-lspid number
      - prefix (ipv4-prefix | ipv6-prefix)
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- bgp
  - family keyword
  - traffic-statistics
    - direction keyword
  - group reference
  - damping
  - flap-statistics
  - neighbor (ipv4-address-with-zone | ipv6-address-with-zone | keyword)
    - damping
    - end-of-rib
    - flap-statistics
    - hard
    - soft
    - soft-inbound
    - soft-route-refresh
      - family keyword
    - statistics
  - neighbor-as number
    - end-of-rib
    - hard
    - soft
    - soft-inbound
    - soft-route-refresh
      - family keyword
    - statistics
  - prefix (ipv4-prefix | ipv6-prefix)
    - damping
      - neighbor reference
    - flap-statistics
      - neighbor reference
    - traffic-statistics
      - direction keyword
  - protocol
  - traffic-statistics
    - direction keyword
- bier
  - database
    - sub-domain
      - bsl number
      - sub-domain-id number
    - statistics
- dhcp-server
  - dhcpv4 named-item
    - declined-addresses
      - address
        - [address] ipv4-address
        - mask number
      - pool
        - [pool] named-item
    - failover-pool-statistics
      - all
      - pool
        - [pool] named-item
  - leases
    - address

```

reset router dhcp-server dhcpv4 leases address [address]

```

- [address] (ipv4-address-no-zone | ipv6-address-no-zone)
- state keyword
- all
- state keyword
- prefix
- [prefix] ipv4-unicast-prefix
- state keyword
- pool-extended-statistics
- all
- pool
- [pool] named-item
- statistics
- sticky-leases
- host-name
- [host-name] named-item
- host-name-prefix
- [host-name-prefix] named-item
- subnet-extended-statistics
- pool
- [pool] named-item
- prefix
- [prefix] ipv4-unicast-prefix
- dhcpv6 named-item
- failover-pool-statistics
- all
- pool
- [pool] named-item
- leases
- address
- [address] (ipv4-address-no-zone | ipv6-address-no-zone)
- state keyword
- type keyword
- all
- state keyword
- type keyword
- prefix
- [prefix] ipv6-prefix
- state keyword
- type keyword
- pool-extended-statistics
- all
- pool
- [pool] named-item
- pool-threshold-statistics
- all
- pool
- [pool] named-item
- prefix-extended-statistics
- pool
- [pool] named-item
- prefix
- [prefix] ipv6-prefix
- prefix-threshold-statistics
- pool
- [pool] named-item
- prefix
- [prefix] ipv6-prefix
- statistics
- forwarding-table
- all
- slot
- slot-number reference
- grt-lookup
- icmp

```

reset router icmp all

```

- all
- global
- interface
  - interface-name interface-name
- icmp-redirect-route
- address
  - ipv4-address ipv4-address
  - all
- icmp6
- all
- global
- interface
  - interface-name interface-name
- icmp6-redirect-route
- address
  - ipv6-address ipv6-address
  - all
- igmp
- database
  - all
    - group ipv4-multicast-address
    - source ipv4-unicast-address
  - interface
    - group ipv4-multicast-address
    - interface-name interface-name
    - source ipv4-unicast-address
- statistics
- all
- interface
  - interface-name interface-name
- version
- all
- interface
  - interface-name interface-name
- interface interface-name
- hold-time
- mac
  - address
    - [mac-address] mac-address
  - all
- statistics
- urpf-statistics
- isis reference
- adjacency
  - all-adjacencies
  - system-id
    - [system-id] system-id
- database
  - all-databases
  - system-id
    - [system-id] system-id
- export
- overload
  - [overload-type] keyword
- sid-egress-stats
  - adj
    - all
    - interface
      - [interface-name] string
  - adj-set
    - all
    - id
      - [id] reference
  - all

```

reset router isis sid-egress-stats node

```

- node
- all
- prefix
  - [ip-prefix-prefix-length] (ipv4-address-no-zone | ipv6-address-no-zone |
ipv4-prefix | ipv6-prefix)
- sid-ingress-stats
- adj
  - all
  - interface
    - [interface-name] string
- adj-set
  - all
  - id
    - [id] reference
- all
- node
- all
- prefix
  - [ip-prefix-prefix-length] (ipv4-address-no-zone | ipv6-address-no-zone |
ipv4-prefix | ipv6-prefix)
- spf-log
- statistics
- ldp
- fec-egress-statistics
  - [ip-prefix] (ipv4-prefix | ipv6-prefix)
- instance
  - [address-family] keyword
- interface
  - [interface-name] reference
  - ipv4
  - ipv6
  - statistics
- peer
  - [ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)
  - statistics
- resource-failures
- session
  - fec-type keyword
  - overload
  - [peer-lsr-id] reference
  - statistics
  - sub-type keyword
- statistics
- targeted-auto-rx
  - hold-time number
- mld
- database
  - all
    - group ipv6-multicast-address
    - source ipv6-unicast-address
  - interface
    - group ipv6-multicast-address
    - interface-name interface-name
    - source ipv6-unicast-address
  - statistics
    - all
    - interface
      - interface-name interface-name
- version
  - all
  - interface
    - interface-name interface-name
- msdp
- cache

```

reset router msdp cache group-address

```

    - group-address ipv4-multicast-address
    - origin-rp-address ipv4-unicast-address
    - peer-address ipv4-unicast-address
    - source-address ipv4-unicast-address
  - statistics
    - peer-address ipv4-unicast-address
- neighbor
  - address
    - ipv6-address (ipv4-address-with-zone | ipv6-address-with-zone)
  - all
  - interface
    - interface-name interface-name
- ospf number
  - database
    - purge
  - export
  - neighbor
    - interface-name string
    - router-id ipv4-address
  - overload
    - [overload-type] keyword
  - sid-egress-stats
    - adj
      - all
      - interface
        - [interface-name] reference
    - adj-set
      - all
      - id
        - [id] reference
    - all
  - node
    - all
    - prefix
      - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
    - sid-ingress-stats
      - adj
        - all
        - interface
          - [interface-name] reference
      - adj-set
        - all
        - id
          - [id] reference
    - all
  - node
    - all
    - prefix
      - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
  - statistics
- ospf3 number
  - database
    - purge
  - export
  - neighbor
    - interface-name string
    - router-id ipv4-address
  - overload
    - [overload-type] keyword
  - sid-egress-stats
    - adj
      - all

```

reset router ospf3 sid-egress-stats adj interface

```

    - interface
      - [interface-name] reference
    - all
    - node
      - all
      - prefix
        - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
    - sid-ingress-stats
      - adj
        - all
        - interface
          - [interface-name] reference
      - all
      - node
        - all
        - prefix
          - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
    - statistics
  - pim
    - database
      - all
        - group (ipv4-address-no-zone | ipv6-address-no-zone)
        - ipv4
        - ipv6
        - source (ipv4-address-no-zone | ipv6-address-no-zone)
      - interface
        - group (ipv4-address-no-zone | ipv6-address-no-zone)
        - interface-name interface-name
        - ipv4
        - ipv6
        - source (ipv4-address-no-zone | ipv6-address-no-zone)
    - neighbor
      - all
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - ipv4
        - ipv6
      - interface
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - interface-name interface-name
        - ipv4
        - ipv6
    - s-pmsi
      - all
      - md
        - group ipv4-multicast-address
        - source ipv4-unicast-address
      - vprn
        - group (ipv4-address-no-zone | ipv6-address-no-zone)
        - md-group ipv4-multicast-address
        - md-source ipv4-unicast-address
        - source (ipv4-address-no-zone | ipv6-address-no-zone)
    - statistics
      - all
        - group (ipv4-address-no-zone | ipv6-address-no-zone)
        - ipv4
        - ipv6
        - source (ipv4-address-no-zone | ipv6-address-no-zone)
      - interface
        - group (ipv4-address-no-zone | ipv6-address-no-zone)
        - interface-name interface-name
        - ipv4
        - ipv6

```

reset router pim statistics interface source

```

- source (ipv4-address-no-zone | ipv6-address-no-zone)
- vrrp
- instances
- interface interface-name
- all-vrid
- ipv4
- vrid
- virtual-router-id number
- ipv6
- vrid
- virtual-router-id number
- statistics
- all-statistics
- interface interface-name
- all-vrid
- ipv4
- vrid
- virtual-router-id number
- ipv6
- vrid
- virtual-router-id number
- saa
- owner reference test reference
- statistics
- service
- statistics
- name service-name
- counters
- l2pt
- mesh-sdp sdp-bind-id
- all
- counters
- stp
- pip
- spoke-sdp sdp-bind-id
- all
- counters
- l2pt
- stp
- stp
- sap sap
- all
- cem
- counters
- l2pt
- stp
- sdp reference
- keep-alive
- vpls reference
- evpn
- mac-duplication
- all
- duplicate-mac
- [mac-address] reference
- fdb
- all
- mac
- [mac-address] mac-unicast-address-no-zero
- mesh-sdp
- [sdp-bind-id] reference
- sap
- [sap-id] reference
- spoke-sdp
- [sdp-bind-id] reference

```

reset service vpls proxy-arp

- proxy-arp
 - duplicate
 - [ip-address] ipv4-address
 - dynamic
 - [ip-address] ipv4-address
- proxy-nd
 - duplicate
 - [ipv6-address] ipv6-address
 - dynamic
 - [ipv6-address] ipv6-address
- system
 - management-interface
 - netconf
 - call-home
 - all-client
 - statistics
 - netconf-client *reference*
 - statistics
 - listen
 - statistics
 - ntp
 - statistics
 - ptp
 - clock-recovery
 - reboot-required
 - script-control
 - script-policy
 - completed
 - all
 - policy
 - owner *reference*
 - [policy-name] *reference*
 - security
 - management-access-filter
 - ip-filter
 - entry *reference*
 - ipv6-filter
 - entry *reference*
 - mac-filter
 - entry *reference*

2.7.1 reset command descriptions

reset

Synopsis	Clear statistics or reset operational state
Context	reset
Tree	reset
Description	Commands in this context are used to clear specific statistics, reset specific hardware assemblies (for example, cards), and delete temporary operational state data (for example, contents of a log in memory).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card [[slot-number](#)] *reference*

Synopsis	Enter the card list instance
Context	reset card <i>reference</i>
Tree	card
Description	Commands in this context perform reset operations on a specific card.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[slot-number](#)] *reference*

Synopsis	Slot number
Context	reset card <i>reference</i>
Tree	card
Reference	state card <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp [[fp-number](#)] *reference*

Synopsis	Enter the fp list instance
----------	-----------------------------------

Context	reset card <i>reference</i> fp <i>reference</i>
Tree	fp
Description	Commands in this context display information for the specified forwarding plane (FP).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fp-number] *reference*

Synopsis	FP number
Context	reset card <i>reference</i> fp <i>reference</i>
Tree	fp
Reference	state card <i>number</i> fp <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

distributed-cpu-protection

Synopsis	Enter the distributed-cpu-protection context
Context	reset card <i>reference</i> fp <i>reference</i> distributed-cpu-protection
Tree	distributed-cpu-protection
Description	Commands in this context reset the distributed CPU protection information.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

information

Synopsis	Reset distributed CPU protection information
Context	reset card <i>reference</i> fp <i>reference</i> distributed-cpu-protection information
Tree	information
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward-engine-drop-reason

Synopsis	Enter the forward-engine-drop-reason context
Context	reset card <i>reference</i> fp <i>reference</i> forward-engine-drop-reason
Tree	forward-engine-drop-reason
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset forwarding engine drop reason statistics
Context	reset card <i>reference</i> fp <i>reference</i> forward-engine-drop-reason statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	reset card <i>reference</i> fp <i>reference</i> ingress
Tree	ingress
Description	Commands in this context reset the ingress information.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

per-egress-fp-statistics

Synopsis	Reset per egress FP statistics
Context	reset card <i>reference</i> fp <i>reference</i> ingress per-egress-fp-statistics
Tree	per-egress-fp-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group

Synopsis	Enter the queue-group context
Context	reset card <i>reference</i> fp <i>reference</i> ingress queue-group
Tree	queue-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset the queue group statistics
Context	reset card <i>reference</i> fp <i>reference</i> ingress queue-group statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue group instance ID
Context	reset card <i>reference</i> fp <i>reference</i> ingress queue-group statistics instance number
Tree	instance
Max. range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Queue group statistics mode
Context	reset card <i>reference</i> fp <i>reference</i> ingress queue-group statistics mode keyword
Tree	mode
Options	access, network
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-name *string*

Synopsis	Queue group name
Context	reset card <i>reference</i> fp <i>reference</i> ingress queue-group statistics queue-group-name string
Tree	queue-group-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reinitialize

Synopsis	Reset the specified card
Context	reset card <i>reference</i> reinitialize
Tree	reinitialize
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hard-reset-unsupported-mdas

Synopsis	Perform a hard reset on MDAs incapable of soft reset
Context	reset card <i>reference</i> reinitialize hard-reset-unsupported-mdas
Tree	hard-reset-unsupported-mdas
Description	This command allows a soft reset operation when some of the MDAs cannot perform a soft reset. A soft reset is performed on MDAs that support a soft reset, and a hard reset is performed on MDAs that do not support soft resets.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft

Synopsis	Perform a soft reset on the card
Context	reset card <i>reference</i> reinitialize soft
Tree	soft
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	reset filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-exception

Synopsis	Reset operation on the specified IP exception filter
Context	reset filter ip-exception
Tree	ip-exception
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	Statistics direction for IP exception filter entries
Context	reset filter ip-exception direction keyword
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ip-exception entry reference
Tree	entry
Reference	state filter ip-exception <i>filter-name entry number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] reference

Synopsis	IP exception filter name
Context	reset filter ip-exception [filter-name] reference
Tree	[filter-name]
Reference	state filter ip-exception <i>filter-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-filter

Synopsis	Reset operation on the specified IP filter
Context	reset filter ip-filter
Tree	ip-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction keyword

Synopsis	Statistics direction for IP filter entries
Context	reset filter ip-filter direction keyword
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry reference

Synopsis	Entry ID for the filter
Context	reset filter ip-filter entry reference
Tree	entry
Reference	state filter ip-filter <i>filter-name</i> entry <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] reference

Synopsis	IP filter name
Context	reset filter ip-filter [filter-name] reference
Tree	[filter-name]
Reference	state filter ip-filter filter-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-exception

Synopsis	Reset operation on the specified IPv6 exception filter
Context	reset filter ipv6-exception
Tree	ipv6-exception
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction keyword

Synopsis	Statistics direction for IPv6 exception filter entries
Context	reset filter ipv6-exception direction keyword
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry reference

Synopsis	Entry ID for the filter
Context	reset filter ipv6-exception entry reference
Tree	entry
Reference	state filter ipv6-exception filter-name entry number
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[filter-name] reference

Synopsis	IPv6 exception filter name
Context	reset filter ipv6-exception [filter-name] reference
Tree	[filter-name]
Reference	state filter ipv6-exception <i>filter-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	reset filter ipv6-filter
Tree	ipv6-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction keyword

Synopsis	Statistics direction of IPv6 filter entries
Context	reset filter ipv6-filter direction keyword
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry reference

Synopsis	Entry ID for the IPv6 filter
Context	reset filter ipv6-filter entry reference
Tree	entry
Reference	state filter ipv6-filter <i>filter-name</i> entry <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] reference

Synopsis	IPv6 exception filter name
Context	reset filter ipv6-filter [filter-name] reference
Tree	[filter-name]
Reference	state filter ipv6-filter <i>filter-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log

Synopsis	Reset the specified filter log
Context	reset filter log
Tree	log
Description	<p>This command reinitializes or rolls over the specified memory filter log. Memory filter logs are reinitialized and cleared of contents.</p> <p>This command is applicable only to filter logs that are directed to memory destinations. Filter logs with destinations other than memory are not affected by this command.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[log-id] reference

Synopsis	ID of the filter log to reset
Context	reset filter log [log-id] reference
Tree	[log-id]
Reference	state filter log <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [policer-name] reference

Synopsis	Enter the policer list instance
----------	--

Context	reset filter policer <i>reference</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-name] *reference*

Synopsis	Filter policer name
Context	reset filter policer <i>reference</i>
Tree	policer
Reference	state filter policer <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance

Synopsis	Enter the instance context
Context	reset filter policer <i>reference</i> instance
Tree	instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset counters for all policer instances
Context	reset filter policer <i>reference</i> instance all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	Filter policer instance statistics counters to be reset
Context	reset filter policer <i>reference</i> instance all direction <i>keyword</i>

Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	reset filter policer <i>reference</i> instance filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Reset instance statistics counters
Context	reset filter policer <i>reference</i> instance filter ip
Tree	ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	Filter policer instance statistics counters to be reset
Context	reset filter policer <i>reference</i> instance filter ip direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *reference*

Synopsis	Filter policer instance name
Context	reset filter policer <i>reference</i> instance filter ip [name] <i>reference</i>
Tree	[name]

Reference	state filter policer <i>named-item</i> statistics instance filter ip <i>named-item-64-or-empty</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	reset filter policer <i>reference</i> instance filter ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction keyword

Synopsis	Filter policer instance statistics counters to be reset
Context	reset filter policer <i>reference</i> instance filter ipv6 direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] reference

Synopsis	Filter policer instance name
Context	reset filter policer <i>reference</i> instance filter ipv6 [name] <i>reference</i>
Tree	[name]
Reference	state filter policer <i>named-item</i> statistics instance filter ipv6 <i>named-item-64-or-empty</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
----------	--------------------------

Context	reset filter policer <i>reference</i> instance system
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	Filter policer instance statistics counters to be reset
Context	reset filter policer <i>reference</i> instance system direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	reset lag <i>reference</i>
Tree	lag
Description	Commands in this context configure LAG reset operations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] *reference*

Synopsis	LAG name, starting with lag-
Context	reset lag <i>reference</i>
Tree	lag
Reference	state lag <i>lag-interface</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate-queue-statistics

Synopsis	Reset LAG aggregate queue statistics
Context	reset lag <i>reference</i> aggregate-queue-statistics
Tree	aggregate-queue-statistics
Description	This command clears aggregate queue statistics on a PXC-based LAG.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-session

Synopsis	Enter the bfd-session context
Context	reset lag <i>reference</i> bfd-session
Tree	bfd-session
Description	Commands in this context reset the LAG BFD session data.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port

Synopsis	Port identifier in the LAG
Context	reset lag <i>reference</i> bfd-session port
Tree	port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family keyword

Synopsis	BFD session family type
Context	reset lag <i>reference</i> bfd-session port family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-port] reference

Synopsis	Member port of the LAG
Context	reset lag reference bfd-session port [lag-port] reference
Tree	[lag-port]
Reference	state lag lag-interface port reference
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP-statistics

Synopsis	Reset LACP statistics
Context	reset lag reference lACP-statistics
Tree	lACP-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset LAG statistics
Context	reset lag reference statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log

Synopsis	Enter the log context
Context	reset log
Tree	log
Description	Commands in this context provide reset operations for events, logs, and the event handling system (EHS).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-handling

Synopsis	Enter the event-handling context
Context	reset log event-handling
Tree	event-handling
Description	Commands in this context provide reset operations for the EHS.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handlers

Synopsis	Enter the handlers context
Context	reset log event-handling handlers
Tree	handlers
Description	Commands in this context reset statistics related to EHS handlers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset statistics for all EHS handlers
Context	reset log event-handling handlers all
Tree	all
Description	This command resets all statistics for all handlers in the state log event-handling handler context and in the output of the show log event-handling handler command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler

Synopsis	Reset statistics for a specified EHS handler
Context	reset log event-handling handlers handler
Tree	handler
Description	This command resets all statistics for the specified handler in the state log event-handling handler context and in the output of the show log event-handling handler command.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[name] *reference*

Synopsis Handler name to reset
Context [reset log event-handling handlers handler \[name\] reference](#)
Tree [\[name\]](#)
Reference **state log event-handling handler** *named-item*
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

information

Synopsis Reset general EHS operational data
Context [reset log event-handling information](#)
Tree [information](#)
Description This command resets all data in the **state log event-handling summary-statistics** context and in the output of the **show log event-handling information** command.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

log-events

Synopsis Enter the **log-events** context
Context [reset log log-events](#)
Tree [log-events](#)
Description Commands in this context reset the operational state related to log events.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

repeating-events

Synopsis Enter the **repeating-events** context

Context	reset log log-events repeating-events
Tree	repeating-events
Description	Commands in this context reset the operational state related to repeating log events.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset operation for all repeating log events
Context	reset log log-events repeating-events all
Tree	all
Description	This command cancels the repetition of all log events that are currently repeating. All repeating log events stop repeating.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-id

Synopsis	Reset the specified event log
Context	reset log log-id
Tree	log-id
Description	<p>This command reinitializes or rolls over the specified memory or file event log. Memory logs are reinitialized and cleared of contents. File logs are manually rolled over by this command.</p> <p>This command is applicable only to event logs that are directed to file destinations and memory destinations. This command does not affect SNMP, syslog, console, CLI, or session logs.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] reference

Synopsis	Name of the event log to reset
Context	reset log log-id [name] reference
Tree	[name]
Reference	state log log-id log-name

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mda

Synopsis	Enter the mda context
Context	reset mda
Tree	mda
Description	Commands in this context perform reset operations on an MDA in a specified slot.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card-slot [[slot-number](#)] *reference*

Synopsis	Enter the card-slot list instance
Context	reset mda card-slot reference
Tree	card-slot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[slot-number] *reference*

Synopsis	Slot number
Context	reset mda card-slot reference
Tree	card-slot
Reference	state card <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mda-slot [[mda](#)] *reference*

Synopsis	Enter the mda-slot list instance
Context	reset mda card-slot reference mda-slot reference

Tree	mda-slot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mda] *reference*

Synopsis	Card MDA slot
Context	reset mda card-slot <i>reference</i> mda-slot <i>reference</i>
Tree	mda-slot
Reference	state card <i>number mda number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec-statistics

Synopsis	Reset MDA IPsec statistics
Context	reset mda card-slot <i>reference</i> mda-slot <i>reference</i> ipsec-statistics
Tree	ipsec-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reinitialize

Synopsis	Reset the specified MDA
Context	reset mda card-slot <i>reference</i> mda-slot <i>reference</i> reinitialize
Tree	reinitialize
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router [[router-instance](#)] *string*

Synopsis	Enter the router list instance
Context	reset router <i>string</i>
Tree	router

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-instance] string

Synopsis	Router name or VPRN service name
Context	reset router string
Tree	router
MD-CLI default	Base
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arp

Synopsis	Enter the arp context
Context	reset router string arp
Tree	arp
Description	Commands in this context reset ARP cache entries.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Reset the ARP cache entries for the IPv4 address
Context	reset router string arp address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address ipv4-address

Synopsis	IPv4 address
Context	reset router string arp address ipv4-address ipv4-address

Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ARP cache entries
Context	reset router <i>string</i> arp all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset ARP cache entries for the interface
Context	reset router <i>string</i> arp interface interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> arp interface interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	reset router <i>string</i> bfd
Tree	bfd

Description	Commands in this context reset bidirectional forwarding (BFD) sessions and statistics.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session

Synopsis	Enter the session context
Context	reset router string bfd session
Tree	session
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isp-ldp

Synopsis	Enter the Isp-ldp context
Context	reset router string bfd session Isp-ldp
Tree	Isp-ldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

head

Synopsis	Enter the head context
Context	reset router string bfd session Isp-ldp head
Tree	head
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router string bfd session Isp-ldp head session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd session lsp-ldp head session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd session lsp-ldp head session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tail

Synopsis	Enter the tail context
Context	reset router <i>string</i> bfd session lsp-ldp tail
Tree	tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd session lsp-ldp tail session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router <i>string</i> bfd session lsp-ldp tail session-key dst-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dst-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd session lsp-ldp tail session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-rsvp

Synopsis	Enter the lsp-rsvp context
Context	reset router <i>string</i> bfd session lsp-rsvp
Tree	lsp-rsvp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

head

Synopsis	Enter the head context
Context	reset router <i>string</i> bfd session lsp-rsvp head
Tree	head
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name

Synopsis	Reset information for the RSVP session name
Context	reset router <i>string</i> bfd session lsp-rsvp head rsvp-session-name
Tree	rsvp-session-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name *string-not-all-spaces*

Synopsis	RSVP session name
Context	reset router <i>string</i> bfd session lsp-rsvp head rsvp-session-name rsvp-session-name <i>string-not-all-spaces</i>
Tree	rsvp-session-name
String length	1 to 256
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd session lsp-rsvp head session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router <i>string</i> bfd session lsp-rsvp head session-key dst-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dst-ip
Notes	This element is mandatory.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lsp-id *number*

Synopsis LSP ID
Context [reset router](#) *string* [bfd session](#) [lsp-rsvp head session-key](#) [lsp-id](#) *number*
Tree [lsp-id](#)
Max. range 0 to 4294967295
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Source address
Context [reset router](#) *string* [bfd session](#) [lsp-rsvp head session-key](#) [src-ip](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
Tree [src-ip](#)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

tunnel-id *number*

Synopsis Tunnel ID
Context [reset router](#) *string* [bfd session](#) [lsp-rsvp head session-key](#) [tunnel-id](#) *number*
Tree [tunnel-id](#)
Max. range 0 to 4294967295
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

tail

Synopsis	Enter the tail context
Context	reset router <i>string</i> bfd session lsp-rsvp tail
Tree	tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name

Synopsis	Reset information for the RSVP session name
Context	reset router <i>string</i> bfd session lsp-rsvp tail rsvp-session-name
Tree	rsvp-session-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name *string-not-all-spaces*

Synopsis	RSVP session name
Context	reset router <i>string</i> bfd session lsp-rsvp tail rsvp-session-name rsvp-session-name <i>string-not-all-spaces</i>
Tree	rsvp-session-name
String length	1 to 256
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	RSVP session sender IP address
Context	reset router <i>string</i> bfd session lsp-rsvp tail rsvp-session-name sender-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	sender-ip
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd session lsp-rsvp tail session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router <i>string</i> bfd session lsp-rsvp tail session-key dst-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dst-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-id *number*

Synopsis	LSP ID
Context	reset router <i>string</i> bfd session lsp-rsvp tail session-key lsp-id <i>number</i>
Tree	lsp-id
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd session lsp-rsvp tail session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-id *number*

Synopsis	Tunnel ID
Context	reset router <i>string</i> bfd session lsp-rsvp tail session-key tunnel-id <i>number</i>
Tree	tunnel-id
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-tp

Synopsis	Enter the mpls-tp context
Context	reset router <i>string</i> bfd session mpls-tp
Tree	mpls-tp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-id

Synopsis	Reset information for the LSP ID
Context	reset router <i>string</i> bfd session mpls-tp lsp-id
Tree	lsp-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *string-not-all-spaces*

Synopsis	LSP name
Context	reset router <i>string</i> bfd session mpls-tp lsp-id lsp-name <i>string-not-all-spaces</i>

Tree	lsp-name
String length	1 to 256
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path *keyword*

Synopsis	Path status
Context	reset router <i>string</i> bfd session mpls-tp lsp-id path <i>keyword</i>
Tree	path
Options	working, protecting
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

point-to-multipoint

Synopsis	Enter the point-to-multipoint context
Context	reset router <i>string</i> bfd session point-to-multipoint
Tree	point-to-multipoint
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

p2mp-interface-name

Synopsis	Reset information for the P2MP interface
Context	reset router <i>string</i> bfd session point-to-multipoint p2mp-interface-name
Tree	p2mp-interface-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[p2mp-interface-name] *string*

Synopsis	P2MP interface name
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Context	reset router <i>string</i> bfd session point-to-multipoint p2mp-interface-name [p2mp-interface-name] <i>string</i>
Tree	[p2mp-interface-name]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

point-to-point

Synopsis	Enter the point-to-point context
Context	reset router <i>string</i> bfd session point-to-point
Tree	point-to-point
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd session point-to-point session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router <i>string</i> bfd session point-to-point session-key dst (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dst
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
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Context	reset router <i>string</i> bfd session point-to-point session-key src (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seamless-lsp-path

Synopsis	Enter the seamless-lsp-path context
Context	reset router <i>string</i> bfd session seamless-lsp-path
Tree	seamless-lsp-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all sessions
Context	reset router <i>string</i> bfd session seamless-lsp-path all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd session seamless-lsp-path session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-index number

Synopsis	LSP index
Context	reset router <i>string</i> bfd session seamless-lsp-path session-key lsp-index <i>number</i>

Tree	lsp-index
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-lspid *number*

Synopsis	LSP path ID
Context	reset router <i>string</i> bfd session seamless-lsp-path session-key path-lspid <i>number</i>
Tree	path-lspid
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd session seamless-lsp-path session-key prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd session seamless-lsp-path session-key src-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seamless-sr-policy

Synopsis	Enter the seamless-sr-policy context
Context	reset router <i>string</i> bfd session seamless-sr-policy
Tree	seamless-sr-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all sessions
Context	reset router <i>string</i> bfd session seamless-sr-policy all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd session seamless-sr-policy session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-index *number*

Synopsis	LSP index
Context	reset router <i>string</i> bfd session seamless-sr-policy session-key lsp-index <i>number</i>
Tree	lsp-index
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-lspid *number*

Synopsis	LSP path ID
Context	reset router <i>string</i> bfd session seamless-sr-policy session-key path-lspid <i>number</i>
Tree	path-lspid
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd session seamless-sr-policy session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd session seamless-sr-policy session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Enter the statistics context
Context	reset router <i>string</i> bfd statistics
Tree	statistics

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ldp

Synopsis	Enter the lsp-ldp context
Context	reset router <i>string</i> bfd statistics lsp-ldp
Tree	lsp-ldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

head

Synopsis	Enter the head context
Context	reset router <i>string</i> bfd statistics lsp-ldp head
Tree	head
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd statistics lsp-ldp head session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd statistics lsp-ldp head session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd statistics lsp-ldp head session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tail

Synopsis	Enter the tail context
Context	reset router <i>string</i> bfd statistics lsp-ldp tail
Tree	tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd statistics lsp-ldp tail session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router <i>string</i> bfd statistics lsp-ldp tail session-key dst-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dst-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd statistics lsp-ldp tail session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-rsvp

Synopsis	Enter the lsp-rsvp context
Context	reset router <i>string</i> bfd statistics lsp-rsvp
Tree	lsp-rsvp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

head

Synopsis	Enter the head context
Context	reset router <i>string</i> bfd statistics lsp-rsvp head
Tree	head
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name

Synopsis	Reset information for the RSVP session name
Context	reset router <i>string</i> bfd statistics lsp-rsvp head rsvp-session-name
Tree	rsvp-session-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name *string-not-all-spaces*

Synopsis	RSVP session name
Context	reset router <i>string</i> bfd statistics lsp-rsvp head rsvp-session-name rsvp-session-name string-not-all-spaces
Tree	rsvp-session-name
String length	1 to 256
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd statistics lsp-rsvp head session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router <i>string</i> bfd statistics lsp-rsvp head session-key dst-ip (ipv4-address-no-zone ipv6-address-no-zone)
Tree	dst-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-id *number*

Synopsis	LSP ID
Context	reset router <i>string</i> bfd statistics lsp-rsvp head session-key lsp-id <i>number</i>
Tree	lsp-id

Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd statistics lsp-rsvp head session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-id *number*

Synopsis	Tunnel ID
Context	reset router <i>string</i> bfd statistics lsp-rsvp head session-key tunnel-id <i>number</i>
Tree	tunnel-id
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tail

Synopsis	Enter the tail context
Context	reset router <i>string</i> bfd statistics lsp-rsvp tail
Tree	tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name

Synopsis	Reset information for the RSVP session name
Context	reset router <i>string</i> bfd statistics lsp-rsvp tail rsvp-session-name
Tree	rsvp-session-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-session-name *string-not-all-spaces*

Synopsis	RSVP session name
Context	reset router <i>string</i> bfd statistics lsp-rsvp tail rsvp-session-name rsvp-session-name <i>string-not-all-spaces</i>
Tree	rsvp-session-name
String length	1 to 256
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	RSVP session sender IP address
Context	reset router <i>string</i> bfd statistics lsp-rsvp tail rsvp-session-name sender-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	sender-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd statistics lsp-rsvp tail session-key
Tree	session-key

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Destination address
Context [reset router](#) *string* [bfd statistics](#) [lsp-rsvp tail session-key](#) **dst-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [dst-ip](#)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lsp-id *number*

Synopsis LSP ID
Context [reset router](#) *string* [bfd statistics](#) [lsp-rsvp tail session-key](#) **lsp-id** *number*
Tree [lsp-id](#)
Max. range 0 to 4294967295
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Source address
Context [reset router](#) *string* [bfd statistics](#) [lsp-rsvp tail session-key](#) **src-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [src-ip](#)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

tunnel-id *number*

Synopsis Tunnel ID

Context	reset router <i>string</i> bfd statistics lsp-rsvp tail session-key tunnel-id <i>number</i>
Tree	tunnel-id
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-tp

Synopsis	Enter the mpls-tp context
Context	reset router <i>string</i> bfd statistics mpls-tp
Tree	mpls-tp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-id

Synopsis	Reset information for the LSP ID
Context	reset router <i>string</i> bfd statistics mpls-tp lsp-id
Tree	lsp-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *string-not-all-spaces*

Synopsis	LSP name
Context	reset router <i>string</i> bfd statistics mpls-tp lsp-id lsp-name <i>string-not-all-spaces</i>
Tree	lsp-name
String length	1 to 256
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path keyword

Synopsis	Path status
Context	reset router <i>string</i> bfd statistics mpls-tp lsp-id path <i>keyword</i>
Tree	path
Options	working, protecting
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

point-to-multipoint

Synopsis	Enter the point-to-multipoint context
Context	reset router <i>string</i> bfd statistics point-to-multipoint
Tree	point-to-multipoint
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

p2mp-interface-name

Synopsis	Reset information for the P2MP interface
Context	reset router <i>string</i> bfd statistics point-to-multipoint p2mp-interface-name
Tree	p2mp-interface-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[p2mp-interface-name] string

Synopsis	P2MP interface name
Context	reset router <i>string</i> bfd statistics point-to-multipoint p2mp-interface-name [p2mp-interface-name] <i>string</i>
Tree	[p2mp-interface-name]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

point-to-point

Synopsis	Enter the point-to-point context
Context	reset router string bfd statistics point-to-point
Tree	point-to-point
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router string bfd statistics point-to-point session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination address
Context	reset router string bfd statistics point-to-point session-key dst (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dst
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router string bfd statistics point-to-point session-key src (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seamless-lsp-path

Synopsis	Enter the seamless-lsp-path context
Context	reset router <i>string</i> bfd statistics seamless-lsp-path
Tree	seamless-lsp-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all sessions
Context	reset router <i>string</i> bfd statistics seamless-lsp-path all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd statistics seamless-lsp-path session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-index number

Synopsis	LSP index
Context	reset router <i>string</i> bfd statistics seamless-lsp-path session-key lsp-index <i>number</i>
Tree	lsp-index
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-lspid *number*

Synopsis	LSP path ID
Context	reset router <i>string</i> bfd statistics seamless-lsp-path session-key path-lspid <i>number</i>
Tree	path-lspid
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd statistics seamless-lsp-path session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd statistics seamless-lsp-path session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seamless-sr-policy

Synopsis	Enter the seamless-sr-policy context
Context	reset router <i>string</i> bfd statistics seamless-sr-policy
Tree	seamless-sr-policy

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all sessions
Context	reset router <i>string</i> bfd statistics seamless-sr-policy all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-key

Synopsis	Reset information for the session key
Context	reset router <i>string</i> bfd statistics seamless-sr-policy session-key
Tree	session-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-index *number*

Synopsis	LSP index
Context	reset router <i>string</i> bfd statistics seamless-sr-policy session-key lsp-index <i>number</i>
Tree	lsp-index
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-lspid *number*

Synopsis	LSP path ID
Context	reset router <i>string</i> bfd statistics seamless-sr-policy session-key path-lspid <i>number</i>
Tree	path-lspid
Max. range	0 to 4294967295

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Prefix
Context	reset router <i>string</i> bfd statistics seamless-sr-policy session-key prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> bfd statistics seamless-sr-policy session-key src-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	src-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp

Synopsis	Enter the bgp context
Context	reset router <i>string</i> bgp
Tree	bgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	reset router <i>string</i> bgp family <i>keyword</i>

Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] keyword

Synopsis	Address family for BGP reset actions
Context	reset router <i>string</i> bgp family <i>keyword</i>
Tree	family
Options	label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traffic-statistics

Synopsis	Reset BGP-LU traffic statistics counters to zero
Context	reset router <i>string</i> bgp family <i>keyword</i> traffic-statistics
Tree	traffic-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction keyword

Synopsis	Specifies the direction of the data-path
Context	reset router <i>string</i> bgp family <i>keyword</i> traffic-statistics direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [group-name] reference

Synopsis	Enter the group list instance
Context	reset router <i>string</i> bgp group <i>reference</i>

Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] reference

Synopsis	Group name
Context	reset router <i>string</i> bgp group <i>reference</i>
Tree	group
Reference	state router <i>named-item-64</i> bgp group <i>named-item-64</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping

Synopsis	Reset the route damping information for received routes
Context	reset router <i>string</i> bgp group <i>reference</i> damping
Tree	damping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flap-statistics

Synopsis	Reset counter to zero for selected subset of RIB-INs
Context	reset router <i>string</i> bgp group <i>reference</i> flap-statistics
Tree	flap-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [neighbor-id] (ipv4-address-with-zone | ipv6-address-with-zone | keyword)

Synopsis	Enter the neighbor list instance
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>)

Tree	neighbor
Description	Commands in this context reset the specified peers or set of peers. By default, the TCP connection is brought down and the state of the BGP session returns to the idle state.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[neighbor-id] (*ipv4-address-with-zone* | *ipv6-address-with-zone* | *keyword*)

Synopsis	Neighbor ID
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>)
Tree	neighbor
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Options	external – Reset all eBGP neighbors all – Reset all BGP neighbors
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping

Synopsis	Reset the route damping information for received routes
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) damping
Tree	damping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-of-rib

Synopsis	Reset the Routing Information Base (RIB)
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) end-of-rib
Tree	end-of-rib

Description	When configured, the router immediately deletes stale routes from the neighbor and aborts graceful restart procedures.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flap-statistics

Synopsis	Reset counter to zero for selected subset of RIB-INs
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) flap-statistics
Tree	flap-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hard

Synopsis	Reset BGP neighbors with TCP connection teardown
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) hard
Tree	hard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft

Synopsis	Reevaluate routes against configured export policies
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) soft
Tree	soft
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft-inbound

Synopsis	Reevaluate routes against configured import policies
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) soft-inbound

Tree	soft-inbound
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft-route-refresh

Synopsis	Reset a session by sending messages to the peer
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) soft-route-refresh
Tree	soft-route-refresh
Description	<p>When configured, the router sends one or more Route Refresh messages to the peer, but the session remains up.</p> <p>If this command is configured and an address family is not provided, the session remains established, and one Route Refresh message is transmitted to the peer for each address family active on the session. If this command is configured and an address family is also provided, the session remains established and a single Route Refresh message is transmitted to the peer requesting that it resend only its routes belonging to that one address family.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family keyword

Synopsis	Address family
Context	reset router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>keyword</i>) soft-route-refresh family <i>keyword</i>
Tree	family
Description	This command configures the address family encoded in the Route Refresh request sent to the peer.
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset BGP neighbor statistics
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Context	reset router string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone keyword) statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-as [\[as-number\]](#) *number*

Synopsis	Enter the neighbor-as list instance
Context	reset router string bgp neighbor-as number
Tree	neighbor-as
Description	Commands in this context reset all BGP neighbors with the specified peer Autonomous System (AS).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[as-number] *number*

Synopsis	AS number
Context	reset router string bgp neighbor-as number
Tree	neighbor-as
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-of-rib

Synopsis	Reset the Routing Information Base (RIB)
Context	reset router string bgp neighbor-as number end-of-rib
Tree	end-of-rib
Description	When configured, the router immediately deletes stale routes from the neighbor and aborts graceful restart procedures.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hard

Synopsis	Reset BGP neighbors with TCP connection teardown
Context	reset router <i>string</i> bgp neighbor-as <i>number</i> hard
Tree	hard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft

Synopsis	Reevaluate routes against configured export policies
Context	reset router <i>string</i> bgp neighbor-as <i>number</i> soft
Tree	soft
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft-inbound

Synopsis	Reevaluate routes against configured import policies
Context	reset router <i>string</i> bgp neighbor-as <i>number</i> soft-inbound
Tree	soft-inbound
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

soft-route-refresh

Synopsis	Reset a session by sending messages to the peer
Context	reset router <i>string</i> bgp neighbor-as <i>number</i> soft-route-refresh
Tree	soft-route-refresh
Description	<p>When configured, the router sends one or more Route Refresh messages to the peer, but the session remains up.</p> <p>If this command is configured and an address family is not provided, the session remains established, and one Route Refresh message is transmitted to the peer for each address family active on the session. If this command is configured and an address family is also provided, the session remains established and a single Route Refresh message is transmitted to the peer requesting that it resend only its routes belonging to that one address family.</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family *keyword*

Synopsis	Address family
Context	reset router <i>string</i> bgp neighbor-as <i>number</i> soft-route-refresh family <i>keyword</i>
Tree	family
Description	This command configures the address family encoded in the Route Refresh request sent to the peer.
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset BGP neighbor statistics
Context	reset router <i>string</i> bgp neighbor-as <i>number</i> statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	reset router <i>string</i> bgp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
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Context	reset router string bgp prefix (ipv4-prefix ipv6-prefix)
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping

Synopsis	Reset RFD route history block for a subset of RIB-INs
Context	reset router string bgp prefix (ipv4-prefix ipv6-prefix) damping
Tree	damping
Description	When configured, this command removes the Route Flap Damping (RFD) route history block for the selected subset of RIB-INs when the neighbor IP address is also provided.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor reference

Synopsis	IP address of the BGP neighbor
Context	reset router string bgp prefix (ipv4-prefix ipv6-prefix) damping neighbor reference
Tree	neighbor
Reference	state router named-item-64 bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flap-statistics

Synopsis	Resets the route flap statistics
Context	reset router string bgp prefix (ipv4-prefix ipv6-prefix) flap-statistics
Tree	flap-statistics
Description	When configured, the router resets the counter (number of flaps) to zero for the selected subset of RIB-INs when the neighbor IP address is also provided.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor *reference*

Synopsis	IP address of the BGP neighbor
Context	reset router <i>string</i> bgp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) flap-statistics neighbor <i>reference</i>
Tree	neighbor
Reference	state router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traffic-statistics

Synopsis	Reset BGP-LU traffic statistics counters to zero
Context	reset router <i>string</i> bgp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) traffic-statistics
Tree	traffic-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	Specifies the direction of the data-path
Context	reset router <i>string</i> bgp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) traffic-statistics direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol

Synopsis	Resets the BGP instance, causing all sessions to restart (return to IDLE)
Context	reset router <i>string</i> bgp protocol
Tree	protocol
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traffic-statistics

Synopsis	Reset BGP-LU traffic statistics counters to zero
Context	reset router <i>string</i> bgp traffic-statistics
Tree	traffic-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	Specifies the direction of the data-path
Context	reset router <i>string</i> bgp traffic-statistics direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bier

Synopsis	Enter the bier context
Context	reset router <i>string</i> bier
Tree	bier
Description	Commands in this context perform reset operations on Bit Index Explicit Replication (BIER) entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database

Synopsis	Enter the database context
Context	reset router <i>string</i> bier database
Tree	database
Description	Commands in this context reset the BIER database.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sub-domain

Synopsis	Reset the sub-domain
Context	reset router <i>string</i> bier database sub-domain
Tree	sub-domain
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsl *number*

Synopsis	Sub-domain BSL
Context	reset router <i>string</i> bier database sub-domain bsl <i>number</i>
Tree	bsl
Max. range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sub-domain-id *number*

Synopsis	Sub-domain ID
Context	reset router <i>string</i> bier database sub-domain sub-domain-id <i>number</i>
Tree	sub-domain-id
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset statistics
Context	reset router <i>string</i> bier statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-server

Synopsis	Enter the dhcp-server context
Context	reset router string dhcp-server
Tree	dhcp-server
Description	Commands in this context reset DHCPv4 server entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv4 [[server-name](#)] *named-item*

Synopsis	Enter the dhcpv4 list instance
Context	reset router string dhcp-server dhcpv4 named-item
Tree	dhcpv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[server-name](#)] *named-item*

Synopsis	Server name
Context	reset router string dhcp-server dhcpv4 named-item
Tree	dhcpv4
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

declined-addresses

Synopsis	Enter the declined-addresses context
Context	reset router string dhcp-server dhcpv4 named-item declined-addresses
Tree	declined-addresses
Description	Commands in this context make declined DHCPv4 addresses available.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

address

Synopsis Make the specified declined addresses available

Context [reset router string dhcp-server dhcpv4 named-item declined-addresses address](#)

Tree [address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[address] ipv4-address

Synopsis IPv4 address

Context [reset router string dhcp-server dhcpv4 named-item declined-addresses address \[address\] ipv4-address](#)

Tree [\[address\]](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mask number

Synopsis IPv4 address mask

Context [reset router string dhcp-server dhcpv4 named-item declined-addresses address mask number](#)

Tree [mask](#)

Range 1 to 32

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pool

Synopsis Make declined addresses in the pool available

Context [reset router string dhcp-server dhcpv4 named-item declined-addresses pool](#)

Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] *named-item*

Synopsis	Pool name
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> declined-addresses pool [pool] <i>named-item</i>
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover-pool-statistics

Synopsis	Enter the failover-pool-statistics context
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> failover-pool-statistics
Tree	failover-pool-statistics
Description	Commands in this context reset the per pool failover statistics.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset failover statistics for all pools
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> failover-pool-statistics all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool

Synopsis	Reset failover statistics for the specified pool
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> failover-pool-statistics pool
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] *named-item*

Synopsis	Pool name
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> failover-pool-statistics pool [pool] <i>named-item</i>
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leases

Synopsis	Enter the leases context
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> leases
Tree	leases
Description	Commands in this context delete leases in the specified DHCPv4 server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Delete the specified DHCPv4 lease
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> leases address
Tree	address
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis IPv4 address

Context [reset router string dhcp-server dhcpv4 named-item leases address \[address\]](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [\[address\]](#)

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

state keyword

Synopsis Lease state

Context [reset router string dhcp-server dhcpv4 named-item leases address state keyword](#)

Tree [state](#)

Options offered, stable, force-renew-pending, remove-pending, held, internal, internal-orphan, internal-offered, internal-held, sticky

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Delete all DHCPv4 leases

Context [reset router string dhcp-server dhcpv4 named-item leases all](#)

Tree [all](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

state keyword

Synopsis Lease state

Context [reset router string dhcp-server dhcpv4 named-item leases all state keyword](#)

Tree [state](#)

Options	offered, stable, force-renew-pending, remove-pending, held, internal, internal-orphan, internal-offered, internal-held, sticky
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Delete all DHCPv4 leases in the specified prefix
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> leases prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] ipv4-unicast-prefix

Synopsis	IPv4 prefix
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> leases prefix [prefix] <i>ipv4-unicast-prefix</i>
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state keyword

Synopsis	Lease state
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> leases prefix state <i>keyword</i>
Tree	state
Options	offered, stable, force-renew-pending, remove-pending, held, internal, internal-orphan, internal-offered, internal-held, sticky
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-extended-statistics

Synopsis	Enter the pool-extended-statistics context
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Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> pool-extended-statistics
Tree	pool-extended-statistics
Description	Commands in this context reset the pool extended statistics peak values.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset extended statistics peak values for all pools
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> pool-extended-statistics all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool

Synopsis	Reset extended statistics peak values for the pool
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> pool-extended-statistics pool
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] *named-item*

Synopsis	Pool name
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> pool-extended-statistics pool [pool] <i>named-item</i>
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset DHCPv4 server statistics
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sticky-leases

Synopsis	Enter the sticky-leases context
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> sticky-leases
Tree	sticky-leases
Description	Commands in this context delete sticky leases.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-name

Synopsis	Delete the sticky lease associated with the hostname
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> sticky-leases host-name
Tree	host-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[host-name] *named-item*

Synopsis	Hostname
Context	reset router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> sticky-leases host-name [host-name] <i>named-item</i>
Tree	[host-name]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

host-name-prefix

Synopsis Delete sticky leases associated with hostnames containing the prefix

Context [reset router](#) *string* [dhcp-server dhcpv4](#) *named-item* [sticky-leases](#) [host-name-prefix](#)

Tree [host-name-prefix](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[host-name-prefix] *named-item*

Synopsis Hostname prefix

Context [reset router](#) *string* [dhcp-server dhcpv4](#) *named-item* [sticky-leases](#) [host-name-prefix](#) [[host-name-prefix](#)] *named-item*

Tree [\[host-name-prefix\]](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

subnet-extended-statistics

Synopsis Enter the **subnet-extended-statistics** context

Context [reset router](#) *string* [dhcp-server dhcpv4](#) *named-item* [subnet-extended-statistics](#)

Tree [subnet-extended-statistics](#)

Description Commands in this context reset the per subnet extended statistics peak values.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pool

Synopsis Reset extended statistics peak values for all subnets in the pool

Context [reset router](#) *string* [dhcp-server dhcpv4](#) *named-item* [subnet-extended-statistics](#) [pool](#)

Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] *named-item*

Synopsis	Pool name
Context	reset router string dhcp-server dhcpv4 named-item subnet-extended-statistics pool [pool] named-item
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset extended statistics peak values for the specified prefix
Context	reset router string dhcp-server dhcpv4 named-item subnet-extended-statistics prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] *ipv4-unicast-prefix*

Synopsis	IPv4 prefix
Context	reset router string dhcp-server dhcpv4 named-item subnet-extended-statistics prefix [prefix] ipv4-unicast-prefix
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv6 [[server-name](#)] *named-item*

Synopsis	Enter the dhcpv6 list instance
Context	reset router string dhcp-server dhcpv6 named-item
Tree	dhcpv6
Description	Commands in this context reset DHCPv6 server entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[server-name] *named-item*

Synopsis	Server name
Context	reset router string dhcp-server dhcpv6 named-item
Tree	dhcpv6
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover-pool-statistics

Synopsis	Enter the failover-pool-statistics context
Context	reset router string dhcp-server dhcpv6 named-item failover-pool-statistics
Tree	failover-pool-statistics
Description	Commands in this context reset the per pool failover statistics.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset failover statistics for all pools
Context	reset router string dhcp-server dhcpv6 named-item failover-pool-statistics all
Tree	all
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pool

Synopsis Reset failover statistics for the specified pool

Context [reset router string dhcp-server dhcpv6 named-item failover-pool-statistics pool](#)

Tree [pool](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[pool] *named-item*

Synopsis Pool name

Context [reset router string dhcp-server dhcpv6 named-item failover-pool-statistics pool \[pool\] *named-item*](#)

Tree [\[pool\]](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

leases

Synopsis Enter the **leases** context

Context [reset router string dhcp-server dhcpv6 named-item leases](#)

Tree [leases](#)

Description Commands in this context delete leases in the specified DHCPv6 server.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address

Synopsis Delete the specified DHCPv6 lease

Context [reset router string dhcp-server dhcpv6 named-item leases address](#)

Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IPv6 address
Context	reset router string dhcp-server dhcpv6 named-item leases address [address] (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	[address]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state keyword

Synopsis	Lease state
Context	reset router string dhcp-server dhcpv6 named-item leases address state keyword
Tree	state
Options	advertised, stable, remove-pending, held, internal, internal-orphan, internal-offered, internal-held
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Lease type
Context	reset router string dhcp-server dhcpv6 named-item leases address type keyword
Tree	type
Options	pd, slaac, wan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Delete all DHCPv6 leases
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Context	reset router string dhcp-server dhcpv6 named-item leases all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state keyword

Synopsis	Lease state
Context	reset router string dhcp-server dhcpv6 named-item leases all state keyword
Tree	state
Options	advertised, stable, remove-pending, held, internal, internal-orphan, internal-offered, internal-held
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Lease type
Context	reset router string dhcp-server dhcpv6 named-item leases all type keyword
Tree	type
Options	pd, slaac, wan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Delete all DHCPv6 leases in the specified prefix
Context	reset router string dhcp-server dhcpv6 named-item leases prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] ipv6-prefix

Synopsis	IPv6 prefix
Context	reset router string dhcp-server dhcpv6 named-item leases prefix [prefix] ipv6-prefix

Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state keyword

Synopsis	Lease state
Context	reset router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> leases prefix state <i>keyword</i>
Tree	state
Options	advertised, stable, remove-pending, held, internal, internal-orphan, internal-offered, internal-held
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Lease type
Context	reset router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> leases prefix type <i>keyword</i>
Tree	type
Options	pd, slaac, wan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-extended-statistics

Synopsis	Enter the pool-extended-statistics context
Context	reset router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> pool-extended-statistics
Tree	pool-extended-statistics
Description	Commands in this context reset the pool extended statistics extended values.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset extended statistics peak values for all pools
Context	reset router string dhcp-server dhcpv6 named-item pool-extended-statistics all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool

Synopsis	Reset extended statistics peak values for the specified pool
Context	reset router string dhcp-server dhcpv6 named-item pool-extended-statistics pool
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] *named-item*

Synopsis	Pool name
Context	reset router string dhcp-server dhcpv6 named-item pool-extended-statistics pool [pool] <i>named-item</i>
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-threshold-statistics

Synopsis	Enter the pool-threshold-statistics context
Context	reset router string dhcp-server dhcpv6 named-item pool-threshold-statistics
Tree	pool-threshold-statistics
Description	Commands in this context reset the per pool threshold statistics peak values.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Reset threshold statistics peak values for all pools
 Context [reset router string dhcp-server dhcpv6 named-item pool-threshold-statistics all](#)
 Tree [all](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

pool

Synopsis Reset threshold statistics peak values for the pool
 Context [reset router string dhcp-server dhcpv6 named-item pool-threshold-statistics pool](#)
 Tree [pool](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[pool] *named-item*

Synopsis Pool name
 Context [reset router string dhcp-server dhcpv6 named-item pool-threshold-statistics pool \[pool\] named-item](#)
 Tree [\[pool\]](#)
 String length 1 to 32
 String format 'string-not-all-spaces' must contain at least one non-space character
 Notes This element is mandatory.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

prefix-extended-statistics

Synopsis Enter the **prefix-extended-statistics** context
 Context [reset router string dhcp-server dhcpv6 named-item prefix-extended-statistics](#)
 Tree [prefix-extended-statistics](#)

Description	Commands in this context reset the per prefix extended statistics peak values.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool

Synopsis	Reset extended statistics peak values for all prefixes in the pool
Context	reset router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> prefix-extended-statistics pool
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] *named-item*

Synopsis	Pool name
Context	reset router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> prefix-extended-statistics pool [pool] <i>named-item</i>
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset extended statistics peak values for the prefix
Context	reset router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> prefix-extended-statistics prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] *ipv6-prefix*

Synopsis	IPv6 prefix
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Context	reset router string dhcp-server dhcpv6 named-item prefix-extended-statistics prefix [prefix] ipv6-prefix
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-threshold-statistics

Synopsis	Enter the prefix-threshold-statistics context
Context	reset router string dhcp-server dhcpv6 named-item prefix-threshold-statistics
Tree	prefix-threshold-statistics
Description	Commands in this context reset the per prefix threshold statistics peak values.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool

Synopsis	Reset threshold statistics peak values for all prefixes in the pool
Context	reset router string dhcp-server dhcpv6 named-item prefix-threshold-statistics pool
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool] named-item

Synopsis	Pool name
Context	reset router string dhcp-server dhcpv6 named-item prefix-threshold-statistics pool [pool] named-item
Tree	[pool]
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset threshold statistics peak values for the specified prefix
Context	reset router string dhcp-server dhcpv6 named-item prefix-threshold-statistics prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] ipv6-prefix

Synopsis	IPv6 prefix
Context	reset router string dhcp-server dhcpv6 named-item prefix-threshold-statistics prefix [prefix] ipv6-prefix
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset DHCPv6 server statistics
Context	reset router string dhcp-server dhcpv6 named-item statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-table

Synopsis	Enter the forwarding-table context
Context	reset router string forwarding-table
Tree	forwarding-table
Description	Commands in this context reset the router forwarding table for the IOM.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all router forwarding tables
Context	reset router <i>string</i> forwarding-table all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

slot

Synopsis	Reset the router forwarding table for the IOM slot
Context	reset router <i>string</i> forwarding-table slot
Tree	slot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

slot-number *reference*

Synopsis	Slot number
Context	reset router <i>string</i> forwarding-table slot slot-number <i>reference</i>
Tree	slot-number
Reference	state card <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grt-lookup

Synopsis	Re-evaluate the route policies for GRT
Context	reset router <i>string</i> grt-lookup
Tree	grt-lookup
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	reset router string icmp
Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ICMP router statistics
Context	reset router string icmp all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	Reset global router statistics
Context	reset router string icmp global
Tree	global
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset ICMP statistics for the interface
Context	reset router string icmp interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
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Context	reset router <i>string</i> icmp interface interface-name interface-name
Tree	interface-name
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-redirect-route

Synopsis	Enter the icmp-redirect-route context
Context	reset router <i>string</i> icmp-redirect-route
Tree	icmp-redirect-route
Description	Commands in this context remove routes created as a result of ICMP redirects received on the management interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Reset the routes associated with the IP address
Context	reset router <i>string</i> icmp-redirect-route address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address *ipv4-address*

Synopsis	IPv4 address
Context	reset router <i>string</i> icmp-redirect-route address ipv4-address ipv4-address
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all routes
Context	reset router <i>string</i> icmp-redirect-route all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp6

Synopsis	Enter the icmp6 context
Context	reset router <i>string</i> icmp6
Tree	icmp6
Description	Commands in this context reset ICMPv6 statistics.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ICMPv6 router statistics
Context	reset router <i>string</i> icmp6 all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	Reset ICMPv6 global router statistics
Context	reset router <i>string</i> icmp6 global
Tree	global
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset ICMPv6 router statistics of the interface
Context	reset router <i>string</i> icmp6 interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> icmp6 interface <i>interface-name</i> <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp6-redirect-route

Synopsis	Enter the icmp6-redirect-route context
Context	reset router <i>string</i> icmp6-redirect-route
Tree	icmp6-redirect-route
Description	Commands in this context delete routes created from ICMPv6 redirects received on the management interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Reset routes associated with the IPv6 address
Context	reset router <i>string</i> icmp6-redirect-route address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	IPv6 address
Context	reset router <i>string</i> icmp6-redirect-route address ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all routes
Context	reset router <i>string</i> icmp6-redirect-route all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp

Synopsis	Enter the igmp context
Context	reset router <i>string</i> igmp
Tree	igmp
Description	Commands in this context perform reset operations on IGMP entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database

Synopsis	Enter the database context
Context	reset router <i>string</i> igmp database
Tree	database
Description	Commands in this context reset IGMP database statistics on a specified interface or IP address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset database for all interfaces, groups, and hosts
Context	reset router <i>string</i> igmp database all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *ipv4-multicast-address*

Synopsis	Group address
Context	reset router <i>string</i> igmp database all group <i>ipv4-multicast-address</i>
Tree	group
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source *ipv4-unicast-address*

Synopsis	Source address
Context	reset router <i>string</i> igmp database all source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset the database on an interface
Context	reset router <i>string</i> igmp database interface
Tree	interface
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

group *ipv4-multicast-address*

Synopsis Group address

Context [reset router](#) *string* [igmp database interface group](#) *ipv4-multicast-address*

Tree [group](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis Interface name

Context [reset router](#) *string* [igmp database interface interface-name](#) *interface-name*

Tree [interface-name](#)

String length 1 to 32

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

source *ipv4-unicast-address*

Synopsis Source address

Context [reset router](#) *string* [igmp database interface source](#) *ipv4-unicast-address*

Tree [source](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

statistics

Synopsis	Enter the statistics context
Context	reset router <i>string</i> igmp statistics
Tree	statistics
Description	Commands in this context reset IGMP statistics on a specified interface or IP address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset statistics for all interfaces, groups, and hosts
Context	reset router <i>string</i> igmp statistics all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset statistics on an interface
Context	reset router <i>string</i> igmp statistics interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> igmp statistics interface interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version

Synopsis	Enter the version context
Context	reset router string igmp version
Tree	version
Description	Commands in this context reset the IGMP version on a specified interface or IP address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset the version for all interfaces, groups, and hosts
Context	reset router string igmp version all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset the version on an interface
Context	reset router string igmp version interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router string igmp version interface interface-name interface-name
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	reset router <i>string</i> interface <i>interface-name</i>
Tree	interface
Description	Commands in this context reset IP interface statistics.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Reset the IP interface activation hold timers
Context	reset router <i>string</i> interface <i>interface-name</i> hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Enter the mac context
Context	reset router <i>string</i> interface <i>interface-name</i> mac
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Reset specified MAC address from associated interface
Context	reset router <i>string</i> interface <i>interface-name</i> mac address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**mac-address**] *mac-address*

Synopsis	MAC address
Context	reset router <i>string</i> interface <i>interface-name</i> mac address [mac-address] <i>mac-address</i>
Tree	[mac-address]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all MAC addresses for the specified interface
Context	reset router <i>string</i> interface <i>interface-name</i> mac all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset the interface traffic statistics
Context	reset router <i>string</i> interface <i>interface-name</i> statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-statistics

Synopsis	Reset the interface uRPF statistics
Context	reset router <i>string</i> interface <i>interface-name</i> urpf-statistics
Tree	urpf-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

isis [[isis-instance](#)] *reference*

Synopsis	Enter the isis list instance
Context	reset router <i>string</i> isis <i>reference</i>
Tree	isis
Description	Commands in this context reset the IS-IS protocol entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[isis-instance](#)] *reference*

Synopsis	IS-IS instance
Context	reset router <i>string</i> isis <i>reference</i>
Tree	isis
MD-CLI default	0
Reference	state router <i>named-item-64</i> isis <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency

Synopsis	Enter the adjacency context
Context	reset router <i>string</i> isis <i>reference</i> adjacency
Tree	adjacency
Description	Commands in this context reset the entries from the IS-IS adjacency database.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

all-adjacencies

Synopsis Reset all IS-IS adjacencies
Context [reset router](#) *string* [isis](#) *reference* [adjacency all-adjacencies](#)
Tree [all-adjacencies](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

system-id

Synopsis Reset the IS-IS adjacency to a node
Context [reset router](#) *string* [isis](#) *reference* [adjacency system-id](#)
Tree [system-id](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[system-id] system-id

Synopsis System ID for a specific node
Context [reset router](#) *string* [isis](#) *reference* [adjacency system-id](#) [\[system-id\]](#) *system-id*
Tree [\[system-id\]](#)
String length 14
String format 'system-id' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Default 0000.0000.0000
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

database

Synopsis Enter the **database** context
Context [reset router](#) *string* [isis](#) *reference* [database](#)

Tree	database
Description	Commands in this context reset the entries from the IS-IS link-state database.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-databases

Synopsis	Reset all IS-IS databases system wide
Context	reset router <i>string</i> isis <i>reference</i> database all-databases
Tree	all-databases
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id

Synopsis	Reset the IS-IS database for a node
Context	reset router <i>string</i> isis <i>reference</i> database system-id
Tree	system-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[system-id] system-id

Synopsis	System ID for a specific node
Context	reset router <i>string</i> isis <i>reference</i> database system-id [system-id] <i>system-id</i>
Tree	[system-id]
String length	14
String format	'system-id' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Default	0000.0000.0000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Reset and re-evaluate IS-IS route policies
Context	reset router <i>string</i> isis <i>reference</i> export
Tree	export
Description	When configured, the system re-evaluates route policies participating in the export mechanism, either as importers or exporters of routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload

Synopsis	Reset the IS-IS overload
Context	reset router <i>string</i> isis <i>reference</i> overload
Tree	overload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[overload-type] keyword

Synopsis	Overload type
Context	reset router <i>string</i> isis <i>reference</i> overload [overload-type] <i>keyword</i>
Tree	[overload-type]
Options	fib, rtm, prefix-limit
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid-egress-stats

Synopsis	Enter the sid-egress-stats context
Context	reset router <i>string</i> isis <i>reference</i> sid-egress-stats
Tree	sid-egress-stats
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj

Synopsis	Enter the adj context
Context	reset router string isis reference sid-egress-stats adj
Tree	adj
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all egress SID statistics for all adjacencies
Context	reset router string isis reference sid-egress-stats adj all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset adjacency SID statistics for an interface
Context	reset router string isis reference sid-egress-stats adj interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] string

Synopsis	Interface name
Context	reset router string isis reference sid-egress-stats adj interface [interface-name] string
Tree	[interface-name]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj-set

Synopsis	Enter the adj-set context
Context	reset router string isis reference sid-egress-stats adj-set
Tree	adj-set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset egress SID statistics for all adjacency sets
Context	reset router string isis reference sid-egress-stats adj-set all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id

Synopsis	Reset adjacency set ID
Context	reset router string isis reference sid-egress-stats adj-set id
Tree	id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] reference

Synopsis	Adjacency set ID
Context	reset router string isis reference sid-egress-stats adj-set id [id] reference
Tree	[id]
Reference	state router named-item-64 isis number segment-routing adjacency-set number
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all egress SID statistics
Context	reset router <i>string</i> isis <i>reference</i> sid-egress-stats all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node

Synopsis	Enter the node context
Context	reset router <i>string</i> isis <i>reference</i> sid-egress-stats node
Tree	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all egress node SID statistics
Context	reset router <i>string</i> isis <i>reference</i> sid-egress-stats node all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset egress statistics for a node prefix SID
Context	reset router <i>string</i> isis <i>reference</i> sid-egress-stats node prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-prefix-length] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-prefix* | *ipv6-prefix*)

Synopsis	Node prefix
Context	reset router string isis reference sid-egress-stats node prefix [ip-prefix-prefix-length] (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	[ip-prefix-prefix-length]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid-ingress-stats

Synopsis	Enter the sid-ingress-stats context
Context	reset router string isis reference sid-ingress-stats
Tree	sid-ingress-stats
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj

Synopsis	Enter the adj context
Context	reset router string isis reference sid-ingress-stats adj
Tree	adj
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset ingress SID statistics for all adjacencies
Context	reset router string isis reference sid-ingress-stats adj all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset ingress SID statistics for an adjacency
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats adj interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *string*

Synopsis	Interface name
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats adj interface [interface-name] <i>string</i>
Tree	[interface-name]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj-set

Synopsis	Enter the adj-set context
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats adj-set
Tree	adj-set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset ingress SID statistics for all adjacency sets
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats adj-set all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id

Synopsis	Reset ingress statistics for the adjacency set ID
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats adj-set id
Tree	id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] reference

Synopsis	Adjacency set ID
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats adj-set id [id] <i>reference</i>
Tree	[id]
Reference	state router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ingress SID statistics
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node

Synopsis	Enter the node context
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats node
Tree	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ingress node SID statistics
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats node all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset ingress statistics for a node prefix SID
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats node prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-prefix-length] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-prefix* | *ipv6-prefix*)

Synopsis	Node prefix
Context	reset router <i>string</i> isis <i>reference</i> sid-ingress-stats node prefix [ip-prefix-prefix-length] (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	[ip-prefix-prefix-length]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-log

Synopsis	Reset the IS-IS SPF log
Context	reset router <i>string</i> isis <i>reference</i> spf-log
Tree	spf-log
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset IS-IS statistics
Context	reset router string isis reference statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp

Synopsis	Enter the ldp context
Context	reset router string ldp
Tree	ldp
Description	Commands in this context configure the LDP reset operations.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

fec-egress-statistics

Synopsis	Reset LDP FEC egress statistics
Context	reset router string ldp fec-egress-statistics
Tree	fec-egress-statistics
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[ip-prefix] (ipv4-prefix | ipv6-prefix)

Synopsis	Prefix FEC
Context	reset router string ldp fec-egress-statistics [ip-prefix] (ipv4-prefix ipv6-prefix)
Tree	[ip-prefix]
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

instance

Synopsis	Reset LDP instance
Context	reset router string ldp instance
Tree	instance
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[address-family] keyword

Synopsis	Address family type
Context	reset router string ldp instance [address-family] keyword
Tree	[address-family]
Options	ipv4, ipv6
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset an LDP interface or its statistics
Context	reset router string ldp interface
Tree	interface
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[interface-name] reference

Synopsis	LDP interface name
Context	reset router string ldp interface [interface-name] reference
Tree	[interface-name]
Reference	state router named-item-64 ldp interface-parameters interface reference
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Reset an IPv4 LDP sub-interface or its statistics
Context	reset router <i>string</i> ldp interface ipv4
Tree	ipv4
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Reset an IPv6 LDP sub-interface or its statistics
Context	reset router <i>string</i> ldp interface ipv6
Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset LDP interface statistics
Context	reset router <i>string</i> ldp interface statistics
Tree	statistics
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

peer

Synopsis	Reset statistics for LDP targeted peer
Context	reset router <i>string</i> ldp peer
Tree	peer
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

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

Synopsis	Peer address
Context	reset router <i>string</i> ldp peer [ip-address] (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	[ip-address]
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset LDP targeted peer statistics
Context	reset router <i>string</i> ldp peer statistics
Tree	statistics
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

resource-failures

Synopsis	Reset resource overload status of LDP instance
Context	reset router <i>string</i> ldp resource-failures
Tree	resource-failures
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

session

Synopsis	Reset overload or statistics for LDP session
Context	reset router <i>string</i> ldp session
Tree	session
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

fec-type keyword

Synopsis	Overload FEC type
Context	reset router string ldp session fec-type keyword
Tree	fec-type
Description	This command specifies the overload Forwarding Equivalence Class (FEC) type.
Options	p2mp, prefixes, svc-fec128, svc-fec129
Notes	The following elements are part of a choice: (fec-type , overload , and sub-type) or statistics .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

overload

Synopsis	Reset resource overload status
Context	reset router string ldp session overload
Tree	overload
Notes	The following elements are part of a choice: (fec-type , overload , and sub-type) or statistics .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[peer-lsr-id] reference

Synopsis	Peer LSR ID
Context	reset router string ldp session [peer-lsr-id] reference
Tree	[peer-lsr-id]
Reference	state router named-item-64 ldp session lsr-id
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset LDP session statistics
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Context	reset router <i>string</i> ldp session statistics
Tree	statistics
Notes	The following elements are part of a choice: (fec-type , overload , and sub-type) or statistics .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

sub-type *keyword*

Synopsis	Overload FEC subtype for P2MP or prefixes
Context	reset router <i>string</i> ldp session sub-type keyword
Tree	sub-type
Options	ipv4, ipv6
Notes	The following elements are part of a choice: (fec-type , overload , and sub-type) or statistics .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset LDP statistics
Context	reset router <i>string</i> ldp statistics
Tree	statistics
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

targeted-auto-rx

Synopsis	Reset LDP auto-rx
Context	reset router <i>string</i> ldp targeted-auto-rx
Tree	targeted-auto-rx
Description	When specified, the system resets unneeded automatic T-LDP sessions on all applicable nodes.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

hold-time *number*

Synopsis	Hold-time where auto-rx targeted peers do not generate
Context	reset router <i>string</i> ldp targeted-auto-rx hold-time <i>number</i>
Tree	hold-time
Range	1 to 65535
Units	seconds
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mld

Synopsis	Enter the mld context
Context	reset router <i>string</i> mld
Tree	mld
Description	Commands in this context perform reset operations on Multicast Listener Discovery (MLD) entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database

Synopsis	Enter the database context
Context	reset router <i>string</i> mld database
Tree	database
Description	Commands in this context reset MLD database entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset database for all interfaces, groups, and hosts
Context	reset router <i>string</i> mld database all
Tree	all

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

group *ipv6-multicast-address*

Synopsis Group address
Context [reset router](#) *string* [mld database all](#) [group](#) *ipv6-multicast-address*
Tree [group](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

source *ipv6-unicast-address*

Synopsis Source address
Context [reset router](#) *string* [mld database all](#) [source](#) *ipv6-unicast-address*
Tree [source](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface

Synopsis Reset the database on an interface
Context [reset router](#) *string* [mld database](#) [interface](#)
Tree [interface](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

group *ipv6-multicast-address*

Synopsis Group address
Context [reset router](#) *string* [mld database interface](#) [group](#) *ipv6-multicast-address*
Tree [group](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> mld database interface <i>interface-name</i> <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source *ipv6-unicast-address*

Synopsis	Source address
Context	reset router <i>string</i> mld database interface source <i>ipv6-unicast-address</i>
Tree	source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Enter the statistics context
Context	reset router <i>string</i> mld statistics
Tree	statistics
Description	Commands in this context reset MLD statistics entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset statistics for all interfaces, groups, and hosts
Context	reset router <i>string</i> mld statistics all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset the statistics on an interface
Context	reset router <i>string</i> mld statistics interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> mld statistics interface <i>interface-name</i> <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version

Synopsis	Enter the version context
Context	reset router <i>string</i> mld version
Tree	version
Description	Commands in this context reset the MLD version entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset the version for all interfaces, groups, and hosts
Context	reset router <i>string</i> mld version all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset the version on an interface
Context	reset router <i>string</i> mld version interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> mld version interface interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

msdp

Synopsis	Enter the msdp context
Context	reset router <i>string</i> msdp
Tree	msdp
Description	Commands in this context perform reset operations on Multicast Source Discovery Protocol (MSDP) entities and statistics.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cache

Synopsis	Reset the MSDP cache
Context	reset router <i>string</i> msdp cache
Tree	cache
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address *ipv4-multicast-address*

Synopsis	Group address
Context	reset router <i>string</i> msdp cache group-address <i>ipv4-multicast-address</i>
Tree	group-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-rp-address *ipv4-unicast-address*

Synopsis	Origin RP address
Context	reset router <i>string</i> msdp cache origin-rp-address <i>ipv4-unicast-address</i>
Tree	origin-rp-address
Description	This command specifies the origin Rendezvous Point (RP) address type of the source-active (SA) entry to reset.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-address *ipv4-unicast-address*

Synopsis	Peer address
Context	reset router <i>string</i> msdp cache peer-address <i>ipv4-unicast-address</i>
Tree	peer-address
Description	This command specifies the peer address of the cache of the IP address for the peer where MSDP SA requests for groups matching the group range for this entry were sent.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address *ipv4-unicast-address*

Synopsis	Source address
Context	reset router <i>string</i> msdp cache source-address <i>ipv4-unicast-address</i>
Tree	source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset the statistics
Context	reset router <i>string</i> msdp statistics
Tree	statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-address *ipv4-unicast-address*

Synopsis	Peer address
Context	reset router <i>string</i> msdp statistics peer-address <i>ipv4-unicast-address</i>
Tree	peer-address
Description	This command specifies the peer address for resetting statistics where MSDP SA requests for groups matching the group range for this entry were sent.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enter the neighbor context
Context	reset router <i>string</i> neighbor
Tree	neighbor
Description	Commands in this context reset neighbor information.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Reset the IPv6 neighbor information
Context	reset router <i>string</i> neighbor address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IPv6 address
Context	reset router <i>string</i> neighbor address ipv6-address (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	ipv6-address
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset information for all neighbors of all interfaces
Context	reset router <i>string</i> neighbor all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset all neighbors of the router interface
Context	reset router <i>string</i> neighbor interface
Tree	interface

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> neighbor interface <i>interface-name</i> <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf [[ospf-instance](#)] *number*

Synopsis	Enter the ospf list instance
Context	reset router <i>string</i> ospf <i>number</i>
Tree	ospf
Description	Commands in this context clear and reset OSPF protocol entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPF instance
Context	reset router <i>string</i> ospf <i>number</i>
Tree	ospf
Max. range	0 to 4294967295
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database

Synopsis	Reset and refresh LSAs
Context	reset router <i>string</i> ospf number database
Tree	database
Description	When configured, the system clears all LSAs received from other nodes, sets all adjacencies other than two-way to one-way, and refreshes all self-originated LSAs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

purge

Synopsis	Reset LSAs
Context	reset router <i>string</i> ospf number database purge
Tree	purge
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Reset and re-evaluate export policies
Context	reset router <i>string</i> ospf number export
Tree	export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Reset neighbor adjacencies
Context	reset router <i>string</i> ospf number neighbor
Tree	neighbor
Description	This command marks the neighbor as dead and re-initiates the affected adjacencies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *string*

Synopsis	Neighbor interface name
Context	reset router <i>string</i> ospf number neighbor interface-name <i>string</i>
Tree	interface-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *ipv4-address*

Synopsis	Neighbor router ID
Context	reset router <i>string</i> ospf number neighbor router-id <i>ipv4-address</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload

Synopsis	Reset the OSPF overload
Context	reset router <i>string</i> ospf number overload
Tree	overload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[overload-type] *keyword*

Synopsis	Overload type
Context	reset router <i>string</i> ospf number overload [overload-type] <i>keyword</i>
Tree	[overload-type]
Options	fib, rtm, rtr-adv-lsa-limit
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid-egress-stats

Synopsis	Enter the sid-egress-stats context
Context	reset router string ospf number sid-egress-stats
Tree	sid-egress-stats
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj

Synopsis	Enter the adj context
Context	reset router string ospf number sid-egress-stats adj
Tree	adj
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset egress statistics for all adjacency SIDs
Context	reset router string ospf number sid-egress-stats adj all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset egress adjacency SID statistics for an interface
Context	reset router string ospf number sid-egress-stats adj interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] reference

Synopsis	Interface name
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Context	reset router string ospf number sid-egress-stats adj interface [interface-name] reference
Tree	[interface-name]
Reference	state router <i>named-item-64 ospf number area ipv4-address interface interface-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj-set

Synopsis	Enter the adj-set context
Context	reset router string ospf number sid-egress-stats adj-set
Tree	adj-set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset egress statistics for all adjacency sets
Context	reset router string ospf number sid-egress-stats adj-set all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id

Synopsis	Reset egress statistics for an adjacency set
Context	reset router string ospf number sid-egress-stats adj-set id
Tree	id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] reference

Synopsis	Adjacency set ID
Context	reset router string ospf number sid-egress-stats adj-set id [id] reference

Tree	[id]
Reference	state router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all egress SID statistics
Context	reset router <i>string</i> ospf <i>number</i> sid-egress-stats all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node

Synopsis	Enter the node context
Context	reset router <i>string</i> ospf <i>number</i> sid-egress-stats node
Tree	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset egress statistics for all prefix SIDs
Context	reset router <i>string</i> ospf <i>number</i> sid-egress-stats node all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset egress SID statistics for a prefix
Context	reset router <i>string</i> ospf <i>number</i> sid-egress-stats node prefix
Tree	prefix

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis	Node prefix
Context	reset router string ospf number sid-egress-stats node prefix [prefix] (<i>ipv4-address-no-zone ipv6-address-no-zone ipv4-prefix ipv6-prefix</i>)
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid-ingress-stats

Synopsis	Enter the sid-ingress-stats context
Context	reset router string ospf number sid-ingress-stats
Tree	sid-ingress-stats
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj

Synopsis	Enter the adj context
Context	reset router string ospf number sid-ingress-stats adj
Tree	adj
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset ingress statistics for all adjacency SIDs
Context	reset router string ospf number sid-ingress-stats adj all
Tree	all
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface

Synopsis Reset ingress adjacency SID statistics on an interface

Context [reset router string ospf number sid-ingress-stats adj interface](#)

Tree [interface](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[interface-name] reference

Synopsis Interface name

Context [reset router string ospf number sid-ingress-stats adj interface \[interface-name\] reference](#)

Tree [\[interface-name\]](#)

Reference **state router named-item-64 ospf number area ipv4-address interface interface-name**

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adj-set

Synopsis Enter the **adj-set** context

Context [reset router string ospf number sid-ingress-stats adj-set](#)

Tree [adj-set](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Reset ingress statistics for all adjacency sets

Context [reset router string ospf number sid-ingress-stats adj-set all](#)

Tree [all](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

id

Synopsis	Reset ingress statistics for a specific adjacency set
Context	reset router <i>string</i> ospf <i>number</i> sid-ingress-stats adj-set id
Tree	id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] reference

Synopsis	Adjacency set ID
Context	reset router <i>string</i> ospf <i>number</i> sid-ingress-stats adj-set id <i>[id] reference</i>
Tree	[id]
Reference	state router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ingress SID statistics
Context	reset router <i>string</i> ospf <i>number</i> sid-ingress-stats all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node

Synopsis	Enter the node context
Context	reset router <i>string</i> ospf <i>number</i> sid-ingress-stats node
Tree	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset ingress statistics for all prefix SIDs
Context	reset router string ospf number sid-ingress-stats node all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset ingress statistics for a prefix SID
Context	reset router string ospf number sid-ingress-stats node prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-prefix* | *ipv6-prefix*)

Synopsis	Node prefix
Context	reset router string ospf number sid-ingress-stats node prefix [prefix] (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset OSPF statistics
Context	reset router string ospf number statistics
Tree	statistics
Description	When configured, the system clears all neighbor, router, interface, SPF and global statistics of this OSPF instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf3 [[ospf-instance](#)] *number*

Synopsis	Enter the ospf3 list instance
Context	reset router <i>string ospf3 number</i>
Tree	ospf3
Description	Commands in this context clear and reset OSPFv3 protocol entities.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPFv3 instance
Context	reset router <i>string ospf3 number</i>
Tree	ospf3
Max. range	0 to 4294967295
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database

Synopsis	Reset and refresh LSAs
Context	reset router <i>string ospf3 number database</i>
Tree	database
Description	When configured, the system clears all LSAs received from other nodes, sets all adjacencies other than two-way to one-way, and refreshes all self-originated LSAs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

purge

Synopsis	Reset LSAs
Context	reset router <i>string ospf3 number database purge</i>

Tree	purge
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Reset and re-evaluate export policies
Context	reset router <i>string</i> ospf3 <i>number</i> export
Tree	export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Reset neighbor adjacencies
Context	reset router <i>string</i> ospf3 <i>number</i> neighbor
Tree	neighbor
Description	When configured, this command marks the neighbor as dead and reinitiates the affected adjacencies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *string*

Synopsis	Neighbor interface name
Context	reset router <i>string</i> ospf3 <i>number</i> neighbor interface-name <i>string</i>
Tree	interface-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *ipv4-address*

Synopsis	Router ID of the neighbor to reset
Context	reset router <i>string</i> ospf3 <i>number</i> neighbor router-id <i>ipv4-address</i>
Tree	router-id

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload

Synopsis	Reset the OSPF overload
Context	reset router <i>string</i> ospf3 <i>number</i> overload
Tree	overload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[overload-type] keyword

Synopsis	Overload type
Context	reset router <i>string</i> ospf3 <i>number</i> overload [overload-type] <i>keyword</i>
Tree	[overload-type]
Options	fib, rtm, rtr-adv-lsa-limit
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid-egress-stats

Synopsis	Enter the sid-egress-stats context
Context	reset router <i>string</i> ospf3 <i>number</i> sid-egress-stats
Tree	sid-egress-stats
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj

Synopsis	Enter the adj context
Context	reset router <i>string</i> ospf3 <i>number</i> sid-egress-stats adj

Tree	adj
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset egress statistics for all adjacency SIDs
Context	reset router <i>string</i> ospf3 <i>number</i> sid-egress-stats adj all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset statistics for adjacency SIDs on an interface
Context	reset router <i>string</i> ospf3 <i>number</i> sid-egress-stats adj interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] reference

Synopsis	Interface name
Context	reset router <i>string</i> ospf3 <i>number</i> sid-egress-stats adj interface [interface-name] <i>reference</i>
Tree	[interface-name]
Reference	state router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all egress SID statistics
Context	reset router <i>string</i> ospf3 <i>number</i> sid-egress-stats all

Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node

Synopsis	Enter the node context
Context	reset router string ospf3 number sid-egress-stats node
Tree	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset egress statistics for all prefix SIDs
Context	reset router string ospf3 number sid-egress-stats node all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset egress statistics for SIDs of a specific prefix
Context	reset router string ospf3 number sid-egress-stats node prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis	Node prefix
Context	reset router string ospf3 number sid-egress-stats node prefix [prefix] (<i>ipv4-address-no-zone ipv6-address-no-zone ipv4-prefix ipv6-prefix</i>)
Tree	[prefix]
Notes	This element is mandatory.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sid-ingress-stats

Synopsis Enter the **sid-ingress-stats** context
Context [reset router string ospf3 number sid-ingress-stats](#)
Tree [sid-ingress-stats](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

adj

Synopsis Enter the **adj** context
Context [reset router string ospf3 number sid-ingress-stats adj](#)
Tree [adj](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

all

Synopsis Reset ingress statistics for all adjacency SIDs
Context [reset router string ospf3 number sid-ingress-stats adj all](#)
Tree [all](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface

Synopsis Reset statistics for adjacency SIDs on an interface
Context [reset router string ospf3 number sid-ingress-stats adj interface](#)
Tree [interface](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[interface-name] reference

Synopsis	Interface name
Context	reset router string ospf3 number sid-ingress-stats adj interface [interface-name] reference
Tree	[interface-name]
Reference	state router <i>named-item-64</i> ospf3 number area ipv4-address interface interface-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all ingress SID statistics
Context	reset router string ospf3 number sid-ingress-stats all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node

Synopsis	Enter the node context
Context	reset router string ospf3 number sid-ingress-stats node
Tree	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset ingress SID statistics for all prefix SIDs
Context	reset router string ospf3 number sid-ingress-stats node all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Reset ingress statistics for specific prefix SIDs
Context	reset router string ospf3 number sid-ingress-stats node prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis	Node prefix
Context	reset router string ospf3 number sid-ingress-stats node prefix [prefix] (<i>ipv4-address-no-zone ipv6-address-no-zone ipv4-prefix ipv6-prefix</i>)
Tree	[prefix]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Reset OSPF statistics
Context	reset router string ospf3 number statistics
Tree	statistics
Description	When configured, the system clears all neighbor, router, interface, SPF and global statistics of this OSPF instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enter the pim context
Context	reset router string pim
Tree	pim
Description	Commands in this context perform reset operations on PIM entities.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

database

Synopsis Enter the **database** context

Context [reset router string pim database](#)

Tree [database](#)

Description Commands in this context reset PIM database statistics on a specified interface or IP address.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Reset the database for all interfaces

Context [reset router string pim database all](#)

Tree [all](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Group address

Context [reset router string pim database all group](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4

Synopsis IPv4 address

Context [reset router string pim database all ipv4](#)

Tree [ipv4](#)

Notes The following elements are part of a choice: **ipv4** or **ipv6**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6

Synopsis IPv6 address
Context [reset router string pim database all ipv6](#)
Tree [ipv6](#)
Notes The following elements are part of a choice: **ipv4** or **ipv6**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Source address
Context [reset router string pim database all source](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [source](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface

Synopsis Reset the database for an interface
Context [reset router string pim database interface](#)
Tree [interface](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Group address
Context [reset router string pim database interface group](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [group](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> pim database interface <i>interface-name</i> <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	IPv4 address
Context	reset router <i>string</i> pim database interface <i>ipv4</i>
Tree	ipv4
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	IPv6 address
Context	reset router <i>string</i> pim database interface <i>ipv6</i>
Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> pim database interface source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

neighbor

Synopsis Enter the **neighbor** context

Context [reset router string pim neighbor](#)

Tree [neighbor](#)

Description Commands in this context reset PIM neighbor data on a specified interface or IP address.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Reset the neighbors on all interfaces

Context [reset router string pim neighbor all](#)

Tree [all](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Neighbor address

Context [reset router string pim neighbor all address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4

Synopsis IPv4 address

Context [reset router string pim neighbor all ipv4](#)

Tree [ipv4](#)

Notes The following elements are part of a choice: **ipv4** or **ipv6**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6

Synopsis IPv6 address

Context [reset router](#) *string* [pim neighbor all ipv6](#)

Tree [ipv6](#)

Notes The following elements are part of a choice: **ipv4** or **ipv6**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface

Synopsis Reset the neighbors on an interface

Context [reset router](#) *string* [pim neighbor interface](#)

Tree [interface](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Neighbor address

Context [reset router](#) *string* [pim neighbor interface address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis Interface name

Context [reset router](#) *string* [pim neighbor interface interface-name interface-name](#)

Tree [interface-name](#)

String length 1 to 32

Notes This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	IPv4 address
Context	reset router <i>string</i> pim neighbor interface ipv4
Tree	ipv4
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	IPv6 address
Context	reset router <i>string</i> pim neighbor interface ipv6
Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

s-pmsi

Synopsis	Enter the s-pmsi context
Context	reset router <i>string</i> pim s-pmsi
Tree	s-pmsi
Description	Commands in this context reset the PIM Selective Provider Multicast Service Interface (S-PMSI) cache.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all
Context	reset router <i>string</i> pim s-pmsi all

Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md

Synopsis	Reset the MD
Context	reset router <i>string</i> pim s-pmsi md
Tree	md
Description	This command specifies the source address used for the Multicast Distribution Tree (MDT) to reset.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *ipv4-multicast-address*

Synopsis	Group address
Context	reset router <i>string</i> pim s-pmsi md group <i>ipv4-multicast-address</i>
Tree	group
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source *ipv4-unicast-address*

Synopsis	Source address
Context	reset router <i>string</i> pim s-pmsi md source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn

Synopsis	Reset the VPRN
Context	<code>reset router string pim s-pmsi vprn</code>
Tree	<code>vprn</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Group address
Context	<code>reset router string pim s-pmsi vprn group (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>group</code>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-group *ipv4-multicast-address*

Synopsis	MD group address
Context	<code>reset router string pim s-pmsi vprn md-group ipv4-multicast-address</code>
Tree	<code>md-group</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-source *ipv4-unicast-address*

Synopsis	MD source address
Context	<code>reset router string pim s-pmsi vprn md-source ipv4-unicast-address</code>
Tree	<code>md-source</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> pim s-pmsi vprn source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Enter the statistics context
Context	reset router <i>string</i> pim statistics
Tree	statistics
Description	Commands in this context reset PIM statistics on a specified interface or IP address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Reset the statistics for all interfaces
Context	reset router <i>string</i> pim statistics all
Tree	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Group address
Context	reset router <i>string</i> pim statistics all group (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	IPv4 address
Context	reset router <i>string</i> pim statistics all ipv4
Tree	ipv4
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	IPv6 address
Context	reset router <i>string</i> pim statistics all ipv6
Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> pim statistics all source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Reset the statistics for an interface
Context	reset router <i>string</i> pim statistics interface
Tree	interface

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Group address
Context [reset router](#) *string* [pim statistics interface group](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [group](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis Interface name
Context [reset router](#) *string* [pim statistics interface interface-name](#) *interface-name*
Tree [interface-name](#)
String length 1 to 32
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv4

Synopsis IPv4 address
Context [reset router](#) *string* [pim statistics interface ipv4](#)
Tree [ipv4](#)
Notes The following elements are part of a choice: **ipv4** or **ipv6**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv6

Synopsis IPv6 address
Context [reset router](#) *string* [pim statistics interface ipv6](#)

Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address
Context	reset router <i>string</i> pim statistics interface source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp

Synopsis	Enter the vrrp context
Context	reset router <i>string</i> vrrp
Tree	vrrp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instances

Synopsis	Enter the instances context
Context	reset router <i>string</i> vrrp instances
Tree	instances
Description	Commands in this context reset VRRP protocol instances.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i>

Tree	interface
Description	Commands in this context reset VRRP protocol instances on an IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-vrid

Synopsis	Reset all VRRP instances on the interface
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> all-vrid
Tree	all-vrid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid

Synopsis	Reset the IPv4 VRRP instance
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> ipv4 vrid

Tree	vrid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-router-id *number*

Synopsis	VRRP instance to reset
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> ipv4 vrid virtual-router-id <i>number</i>
Tree	virtual-router-id
Max. range	-2147483648 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid

Synopsis	Reset the IPv6 VRRP instance
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> ipv6 vrid
Tree	vrid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-router-id *number*

Synopsis	VRRP instance to reset
Context	reset router <i>string</i> vrrp instances interface <i>interface-name</i> ipv6 vrid virtual-router-id <i>number</i>
Tree	virtual-router-id

Max. range	-2147483648 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

statistics

Synopsis	Enter the statistics context
Context	reset router <i>string</i> vrrp statistics
Tree	statistics
Description	Commands in this context reset statistics for VRRP instances on an IP interface or VRRP priority control policies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-statistics

Synopsis	Reset statistics of VRRP instances on all interfaces
Context	reset router <i>string</i> vrrp statistics all-statistics
Tree	all-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	reset router <i>string</i> vrrp statistics interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**interface-name**] *interface-name*

Synopsis	Interface name
Context	reset router <i>string</i> vrrp statistics interface <i>interface-name</i>
Tree	interface

String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-vrid

Synopsis	Reset statistics of all VRRP instances on the interface
Context	reset router <i>string</i> vrrp statistics interface <i>interface-name</i> all-vrid
Tree	all-vrid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	reset router <i>string</i> vrrp statistics interface <i>interface-name</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid

Synopsis	Reset statistics of the IPv4 VRRP instance
Context	reset router <i>string</i> vrrp statistics interface <i>interface-name</i> ipv4 vrid
Tree	vrid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-router-id *number*

Synopsis	VRRP instance to reset
Context	reset router <i>string</i> vrrp statistics interface <i>interface-name</i> ipv4 vrid virtual-router-id <i>number</i>
Tree	virtual-router-id

Max. range -2147483648 to 2147483647
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv6

Synopsis Enter the **ipv6** context
Context [reset router string vrrp statistics interface interface-name ipv6](#)
Tree [ipv6](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

vrid

Synopsis Reset statistics of the IPv6 VRRP instance
Context [reset router string vrrp statistics interface interface-name ipv6 vrid](#)
Tree [vrid](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

virtual-router-id *number*

Synopsis VRRP instance to reset
Context [reset router string vrrp statistics interface interface-name ipv6 vrid virtual-router-id number](#)
Tree [virtual-router-id](#)
Max. range -2147483648 to 2147483647
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

saa

Synopsis Enter the **saa** context
Context [reset saa](#)
Tree [saa](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

owner *[owner-name] reference test reference*

Synopsis Enter the **owner** list instance

Context [reset saa owner reference test reference](#)

Tree [owner](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[owner-name] reference

Synopsis Name of SAA test owner for which to reset statistics

Context [reset saa owner reference test reference](#)

Tree [owner](#)

MD-CLI
default TIMOS CLI

Reference **state saa owner named-item test named-item**

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

test reference

Synopsis Name of the SAA test for which to reset statistics

Context [reset saa owner reference test reference](#)

Tree [owner](#)

Reference **state saa owner named-item test named-item**

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

statistics

Synopsis Clear the SAA test statistics

Context	reset saa owner <i>reference</i> test <i>reference</i> statistics
Tree	statistics
Description	This command clears historical statistics for a completed run. If this option is not configured, the reset operation has no impact.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service

Synopsis	Enter the service context
Context	reset service
Tree	service
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

statistics

Synopsis	Enter the statistics context
Context	reset service statistics
Tree	statistics
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

name [[service-name](#)] *service-name*

Synopsis	Enter the name list instance
Context	reset service statistics name <i>service-name</i>
Tree	name
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[service-name] *service-name*

Synopsis	Service name
Context	reset service statistics name <i>service-name</i>

Tree	name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

counters

Synopsis	Reset counters
Context	reset service statistics name service-name counters
Tree	counters
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

l2pt

Synopsis	Reset L2PT statistics
Context	reset service statistics name service-name l2pt
Tree	l2pt
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mesh-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter the mesh-sdp list instance
Context	reset service statistics name service-name mesh-sdp sdp-bind-id
Tree	mesh-sdp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter spoke-sdp context
Context	reset service statistics name service-name mesh-sdp sdp-bind-id

Tree	mesh-sdp
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all
Context	reset service statistics name <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> all
Tree	all
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

counters

Synopsis	Reset counters
Context	reset service statistics name <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> counters
Tree	counters
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

stp

Synopsis	Reset STP statistics
Context	reset service statistics name <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> stp
Tree	stp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

pip

Synopsis	Reset PIP statistics
Context	reset service statistics name <i>service-name</i> pip

Tree [pip](#)
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis Enter the **spoke-sdp** list instance
Context [reset service statistics name service-name spoke-sdp sdp-bind-id](#)
Tree [spoke-sdp](#)
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis Enter spoke-sdp context
Context [reset service statistics name service-name spoke-sdp sdp-bind-id](#)
Tree [spoke-sdp](#)
String length 3 to 16
String format 'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes This element is part of a list key.
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

all

Synopsis Reset all
Context [reset service statistics name service-name spoke-sdp sdp-bind-id all](#)
Tree [all](#)
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

counters

Synopsis Reset counters
Context [reset service statistics name service-name spoke-sdp sdp-bind-id counters](#)

Tree	counters
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

l2pt

Synopsis	Reset L2PT statistics
Context	reset service statistics name <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt
Tree	l2pt
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

stp

Synopsis	Reset STP statistics
Context	reset service statistics name <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> stp
Tree	stp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

stp

Synopsis	Reset STP statistics
Context	reset service statistics name <i>service-name</i> stp
Tree	stp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	reset service statistics sap <i>sap</i>
Tree	sap
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[sap-id] sap

Synopsis	Enter sap context
Context	reset service statistics sap sap
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all
Context	reset service statistics sap sap all
Tree	all
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

cem

Synopsis	Reset CEM
Context	reset service statistics sap sap cem
Tree	cem
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

counters

Synopsis	Reset counters
Context	reset service statistics sap sap counters
Tree	counters
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

l2pt

Synopsis	Reset L2PT
Context	reset service statistics sap <i>sap l2pt</i>
Tree	l2pt
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

stp

Synopsis	Reset STP
Context	reset service statistics sap <i>sap stp</i>
Tree	stp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

sdp [[sdp-id](#)] *reference*

Synopsis	Enter the sdp list instance
Context	reset service statistics sdp <i>reference</i>
Tree	sdp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[sdp-id] *reference*

Synopsis	Enter sdp context
Context	reset service statistics sdp <i>reference</i>
Tree	sdp
Reference	state service sdp <i>number</i>
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

keep-alive

Synopsis	Reset keep-alive
Context	reset service statistics sdp <i>reference</i> keep-alive
Tree	keep-alive
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

vpls [[service-name](#)] *reference*

Synopsis	Enter the vpls list instance
Context	reset service vpls <i>reference</i>
Tree	vpls
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[**service-name**] *reference*

Synopsis	VPLS service name
Context	reset service vpls <i>reference</i>
Tree	vpls
Reference	state service vpls <i>service-name</i>
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	reset service vpls <i>reference</i> evpn
Tree	evpn
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mac-duplication

Synopsis	Enter the mac-duplication context
Context	reset service vpls <i>reference</i> evpn mac-duplication
Tree	mac-duplication
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all FDB items
Context	reset service vpls <i>reference</i> evpn mac-duplication all
Tree	all
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

duplicate-mac

Synopsis	Reset operations on the duplicate MAC
Context	reset service vpls <i>reference</i> evpn mac-duplication duplicate-mac
Tree	duplicate-mac
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[mac-address] *reference*

Synopsis	MAC address
Context	reset service vpls <i>reference</i> evpn mac-duplication duplicate-mac [mac-address] <i>reference</i>
Tree	[mac-address]
Reference	state service vpls <i>service-name</i> bgp-evpn mac-duplication duplicate-macs address <i>mac-address</i>
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	reset service vpls <i>reference</i> fdb
Tree	fdb
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

all

Synopsis	Reset all FDB items
Context	reset service vpls <i>reference</i> fdb all
Tree	all
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mac

Synopsis	Reset operation on the MAC
Context	reset service vpls <i>reference</i> fdb mac
Tree	mac
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[mac-address] *mac-unicast-address-no-zero*

Synopsis	MAC address
Context	reset service vpls <i>reference</i> fdb mac [mac-address] <i>mac-unicast-address-no-zero</i>
Tree	[mac-address]
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mesh-sdp

Synopsis	Reset operation on the mesh-sdp
Context	reset service vpls <i>reference</i> fdb mesh-sdp
Tree	mesh-sdp
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[sdp-bind-id] *reference*

Synopsis	SDP bind ID
Context	reset service vpls <i>reference</i> fdb mesh-sdp [sdp-bind-id] <i>reference</i>
Tree	[sdp-bind-id]
Reference	state service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i>
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

sap

Synopsis	Reset operation on the SAP
Context	reset service vpls <i>reference</i> fdb sap
Tree	sap
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[sap-id] *reference*

Synopsis	SAP ID
Context	reset service vpls <i>reference</i> fdb sap [sap-id] <i>reference</i>
Tree	[sap-id]
Reference	state service vpls <i>service-name</i> sap <i>sap</i>
Notes	This element is mandatory.
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

spoke-sdp

Synopsis Reset operation on the spoke SDP
Context [reset service vpls reference fdb spoke-sdp](#)
Tree [spoke-sdp](#)
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

[sdp-bind-id] reference

Synopsis Specifies the spoke-sdp
Context [reset service vpls reference fdb spoke-sdp \[sdp-bind-id\] reference](#)
Tree [\[sdp-bind-id\]](#)
Reference **state service vpls service-name spoke-sdp sdp-bind-id**
Notes This element is mandatory.
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

proxy-arp

Synopsis Enter the **proxy-arp** context
Context [reset service vpls reference proxy-arp](#)
Tree [proxy-arp](#)
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

duplicate

Synopsis Reset operation on the IP address
Context [reset service vpls reference proxy-arp duplicate](#)
Tree [duplicate](#)
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

[ip-address] ipv4-address

Synopsis	IP address
Context	reset service vpls <i>reference</i> proxy-arp duplicate [ip-address] <i>ipv4-address</i>
Tree	[ip-address]
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

dynamic

Synopsis	Reset operation on the IP address
Context	reset service vpls <i>reference</i> proxy-arp dynamic
Tree	dynamic
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[ip-address] ipv4-address

Synopsis	IP address
Context	reset service vpls <i>reference</i> proxy-arp dynamic [ip-address] <i>ipv4-address</i>
Tree	[ip-address]
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

proxy-nd

Synopsis	Enter the proxy-nd context
Context	reset service vpls <i>reference</i> proxy-nd
Tree	proxy-nd
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

duplicate

Synopsis	Reset operation on the specified ip-address
Context	reset service vpls <i>reference</i> proxy-nd duplicate
Tree	duplicate
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[ipv6-address] ipv6-address

Synopsis	IPv6 address
Context	reset service vpls <i>reference</i> proxy-nd duplicate [ipv6-address] <i>ipv6-address</i>
Tree	[ipv6-address]
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

dynamic

Synopsis	Reset operation on the IP address
Context	reset service vpls <i>reference</i> proxy-nd dynamic
Tree	dynamic
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[ipv6-address] ipv6-address

Synopsis	IPv6 address
Context	reset service vpls <i>reference</i> proxy-nd dynamic [ipv6-address] <i>ipv6-address</i>
Tree	[ipv6-address]
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
----------	---------------------------------

Context	reset system
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-interface

Synopsis	Enter the management-interface context
Context	reset system management-interface
Tree	management-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf

Synopsis	Enter the netconf context
Context	reset system management-interface netconf
Tree	netconf
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

call-home

Synopsis	Enter the call-home context
Context	reset system management-interface netconf call-home
Tree	call-home
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

all-client

Synopsis	Enter the all-client context
Context	reset system management-interface netconf call-home all-client
Tree	all-client
Introduced	25.7.R1

Platforms 7705 SAR Gen 2

statistics

Synopsis Reset statistics of all NETCONF call-home clients

Context [reset system management-interface netconf call-home all-client statistics](#)

Tree [statistics](#)

Introduced 25.7.R1

Platforms 7705 SAR Gen 2

netconf-client [[netconf-client](#)] *reference*

Synopsis Enter the **netconf-client** list instance

Context [reset system management-interface netconf call-home netconf-client reference](#)

Tree [netconf-client](#)

Description Commands in this context reset operations for NETCONF call-home clients.

Introduced 25.7.R1

Platforms 7705 SAR Gen 2

[**netconf-client**] *reference*

Synopsis NETCONF client

Context [reset system management-interface netconf call-home netconf-client reference](#)

Tree [netconf-client](#)

Reference **state system management-interface netconf call-home netconf-client** *named-item*

Notes This element is part of a list key.

Introduced 25.7.R1

Platforms 7705 SAR Gen 2

statistics

Synopsis Reset NETCONF call-home client statistics

Context [reset system management-interface netconf call-home netconf-client reference statistics](#)

Tree [statistics](#)

Introduced 25.7.R1

Platforms 7705 SAR Gen 2

listen

Synopsis Enter the **listen** context

Context [reset system management-interface netconf listen](#)

Tree [listen](#)

Introduced 25.7.R1

Platforms 7705 SAR Gen 2

statistics

Synopsis Reset NETCONF listen server statistics

Context [reset system management-interface netconf listen statistics](#)

Tree [statistics](#)

Introduced 25.7.R1

Platforms 7705 SAR Gen 2

ntp

Synopsis Enter the **ntp** context

Context [reset system ntp](#)

Tree [ntp](#)

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

statistics

Synopsis Reset NTP statistics

Context [reset system ntp statistics](#)

Tree [statistics](#)

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

ptp

Synopsis	Enter the ptp context
Context	reset system ptp
Tree	ptp
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

clock-recovery

Synopsis	Reset PTP clock recovery algorithm
Context	reset system ptp clock-recovery
Tree	clock-recovery
Description	This command resets the algorithms involved in PTP frequency and time recovery to initial conditions. This clears out any previous history and can be used to ensure a consistent starting state for a test or can be used to clear any unexpected behavior in the algorithm.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

reboot-required

Synopsis	Clear the reboot required state
Context	reset system reboot-required
Tree	reboot-required
Description	This command clears the reboot required information. Use this command after a configuration triggers the reboot required state, but the configuration is removed.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script-control

Synopsis	Enter the script-control context
Context	reset system script-control
Tree	script-control
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

script-policy

Synopsis Enter the **script-policy** context

Context [reset system script-control script-policy](#)

Tree [script-policy](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

completed

Synopsis Enter the **completed** context

Context [reset system script-control script-policy completed](#)

Tree [completed](#)

Description Commands in this context delete completed script run history entries.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Delete script run entries for all script policies

Context [reset system script-control script-policy completed all](#)

Tree [all](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy

Synopsis Delete script run entries for specific policies

Context [reset system script-control script-policy completed policy](#)

Tree [policy](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

owner reference

Synopsis	Script-policy owner for run history deletion
Context	reset system script-control script-policy completed policy owner reference
Tree	owner
Description	<p>This command specifies the script policy owner for run history deletion.</p> <p>The system only deletes run history entries for script policies with this owner and the specified policy name.</p>
Default	TIMOS CLI
Reference	state system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policy-name] reference

Synopsis	Script-policy name for run history deletion
Context	reset system script-control script-policy completed policy [policy-name] reference
Tree	[policy-name]
Reference	state system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security

Synopsis	Enter the security context
Context	reset system security
Tree	security
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-access-filter

Synopsis	Enter the management-access-filter context
Context	reset system security management-access-filter

Tree	management-access-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-filter

Synopsis	Reset operation on the specified IP filter
Context	reset system security management-access-filter ip-filter
Tree	ip-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry reference

Synopsis	Entry ID for the IP filter
Context	reset system security management-access-filter ip-filter entry reference
Tree	entry
Reference	state system security management-access-filter ip-filter entry <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	reset system security management-access-filter ipv6-filter
Tree	ipv6-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry reference

Synopsis	Entry ID for the IPv6 filter
Context	reset system security management-access-filter ipv6-filter entry reference
Tree	entry
Reference	state system security management-access-filter ipv6-filter entry <i>number</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-filter

Synopsis	Reset operation on the specified MAC filter
Context	reset system security management-access-filter mac-filter
Tree	mac-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry *reference*

Synopsis	Entry ID for the MAC filter
Context	reset system security management-access-filter mac-filter entry <i>reference</i>
Tree	entry
Reference	state system security management-access-filter mac-filter entry <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

3 Configuration mode commands

This section lists the commands available in MD-CLI configuration modes.

3.1 Configuration mode commands

See “Editing configuration” in the *7705 SAR Gen 2 MD-CLI User Guide* for more information.

```

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

```

3.1.1 Configuration mode command descriptions

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

Synopsis	Annotate a configuration element with a comment
Context	annotate <i>comment-text-type</i>
Tree	annotate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[comment-text] *comment-text-type*

Synopsis	Comment for the configuration element
Context	annotate <i>comment-text-type</i>
Tree	annotate
String length	0 to 2048
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] *cli-path-type*

Synopsis	Absolute path or relative path from pwc, or 'pwc'
Context	annotate <i>comment-text-type</i> [cli-path] <i>cli-path-type</i>
Tree	[cli-path]
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commit

Synopsis	Commit the candidate configuration
Context	commit
Tree	commit

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

comment *string*

Synopsis	Comment associated with the commit
Context	commit comment string
Tree	comment
String length	1 to 2048
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirmed

Synopsis	Enter the confirmed context
Context	commit confirmed
Tree	confirmed
Description	This context is not supported for the BOF or debug configuration regions.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept

Synopsis	Accept commit confirmed and cancel automatic rollback
Context	commit confirmed accept
Tree	accept
Notes	The following elements are part of a choice: accept , cancel , or (comment and timeout).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cancel

Synopsis	Cancel commit confirmed and roll back changes
Context	commit confirmed cancel

Tree	cancel
Description	When specified, the router rolls back the configuration and returns the changes to the candidate.
Notes	The following elements are part of a choice: accept , cancel , or (comment and timeout).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

comment *string*

Synopsis	Comment associated with the commit
Context	commit confirmed comment <i>string</i>
Tree	comment
String length	1 to 2048
Notes	The following elements are part of a choice: accept , cancel , or (comment and timeout).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

persist-id *string*

Synopsis	Persistent confirmed commit ID
Context	commit confirmed persist-id <i>string</i>
Tree	persist-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[timeout] *number*

Synopsis	Confirmed commit expiration timeout interval
Context	commit confirmed [timeout] <i>number</i>
Tree	[timeout]
Range	1 to 65535
Units	minutes
Default	10

Notes	The following elements are part of a choice: accept , cancel , or (comment and timeout).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Compare changes between datastores
Context	compare <i>string</i> [<i>to</i>] <i>string</i>
Tree	compare
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[from] *string*

Synopsis	Source configuration from which to compare
Context	compare <i>string</i> [<i>to</i>] <i>string</i>
Tree	compare
MD-CLI default	baseline
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[to] *string*

Synopsis	Configuration to compare against source configuration
Context	compare <i>string</i> [<i>to</i>] <i>string</i>
Tree	compare
MD-CLI default	candidate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] *cli-path-type*

Synopsis	Absolute path or relative path from pwc
Context	compare string [to] string [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flat

Synopsis	Show the context from the pwc on each line
Context	compare string [to] string flat
Tree	flat
Description	This option shows the hierarchy on each line starting from the present working context.
Notes	The following elements are part of a choice: flat or netconf-rpc .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

full-context

Synopsis	Show the full context on each line
Context	compare string [to] string full-context
Tree	full-context
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lines *number*

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

Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf-rpc

Synopsis	Display changes in NETCONF <edit-config> RPC format
Context	compare string [to] string netconf-rpc
Tree	netconf-rpc
Description	This option specifies the display of changes in NETCONF <edit-config> RPC format. This option is only supported with the summary option.
Notes	The following elements are part of a choice: flat or netconf-rpc .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary

Synopsis	Suppress specific differences and display a summary
Context	compare string [to] string summary
Tree	summary
Description	This command allows the suppression of specific differences and displays a summarized comparison. The summarized differences in elements under the highest level container that was deleted is displayed with { ... }. A tilde (~) character is displayed to indicate the new value of an element that has changed.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

copy

Synopsis	Copy a configuration element to another
Context	copy
Tree	copy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] cli-path-type

Synopsis	Absolute path or relative path from pwc, or 'pwc'
Context	copy [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to cli-path-type

Synopsis	Destination path, or 'pwc'
Context	copy to cli-path-type
Tree	to
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard

Synopsis	Discard changes in the candidate configuration
Context	discard
Tree	discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] cli-path-type

Synopsis	Absolute path or relative path from pwc
Context	discard [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

insert [\[new-entry\]](#) instance-id

Synopsis	Insert an element into a user-ordered list
----------	--

Context	insert <i>instance-id</i>
Tree	insert
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[new-entry] *instance-id*

Synopsis	Identification of the new entry
Context	insert <i>instance-id</i>
Tree	insert
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

after

Synopsis	Insert an entry after the specified entry
Context	insert <i>instance-id</i> after
Tree	after
Notes	The following elements are part of a choice: after , before , beginning , or end .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] *instance-id*

Synopsis	Absolute path or relative path from pwc
Context	insert <i>instance-id</i> after [cli-path] <i>instance-id</i>
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

before

Synopsis	Insert an entry before the specified entry
Context	insert <i>instance-id</i> before

Tree	before
Notes	The following elements are part of a choice: after , before , beginning , or end .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] *instance-id*

Synopsis	Absolute path or relative path from pwc
Context	insert <i>instance-id</i> before [cli-path] <i>instance-id</i>
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

beginning

Synopsis	Insert the new entry at the beginning of the list
Context	insert <i>instance-id</i> beginning
Tree	beginning
Notes	The following elements are part of a choice: after , before , beginning , or end .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end

Synopsis	Insert the new entry at the end of the list
Context	insert <i>instance-id</i> end
Tree	end
Notes	The following elements are part of a choice: after , before , beginning , or end .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Load configuration into the candidate configuration
Context	load <i>keyword</i>

Tree	load
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mode] keyword

Synopsis	Load mode
Context	load <i>keyword</i>
Tree	load
Options	merge – Merge with the candidate configuration full-replace – Replace the candidate configuration
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-key string

Synopsis	Encryption key of the file to be loaded
Context	load <i>keyword</i> encryption-key <i>string</i>
Tree	encryption-key
String length	8 to 32
Notes	The following elements are part of a mandatory choice: interactive or (encryption-key and url).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interactive

Synopsis	Load the configuration interactively
Context	load <i>keyword</i> interactive
Tree	interactive
Description	<p>This command allows the user to enter configuration commands directly in an interactive session.</p> <p>This command is available with the merge option of the load command.</p> <p>See "Loading configuration interactively" in the <i>7705 SAR Gen 2 MD-CLI User Guide</i> for more information.</p>

Notes	The following elements are part of a mandatory choice: interactive or (encryption-key and url).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[url] string

Synopsis	Location of the file to be loaded
Context	load keyword [url] string
Tree	[url]
String length	1 to 255
Notes	The following elements are part of a mandatory choice: interactive or (encryption-key and url).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rename

Synopsis	Rename a list element
Context	rename
Tree	rename
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] cli-path-type

Synopsis	Source element path to the list, or 'pwc'
Context	rename [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to cli-path-type

Synopsis	Destination key name
Context	rename to cli-path-type

Tree	to
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Match and replace values in the candidate configuration
Context	replace string with string
Tree	replace
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pattern] *string*

Synopsis	String (") or regular expression (') pattern to match
Context	replace string with string
Tree	replace
Description	This command configures a text string or regular expression that defines the values to match.
String length	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

with string

Synopsis	String (") or regular expression (') pattern to replace
Context	replace string with string
Tree	replace
String length	0 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-path] cli-path-type

Synopsis	Absolute path or relative path from pwc
Context	replace string with string [cli-path] cli-path-type
Tree	[cli-path]
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

continue-on-error

Synopsis	Continue the replace operation upon errors
Context	replace string with string continue-on-error
Tree	continue-on-error
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

depth number

Synopsis	Replace operation depth from the pwc
Context	replace string with string depth number
Tree	depth
Range	1 to 4294967040
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-case

Synopsis	Ignore case in pattern match
Context	replace string with string ignore-case
Tree	ignore-case
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rollback

Synopsis	Roll back to a previous configuration
Context	rollback
Tree	rollback
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commit-id *number*

Synopsis	Commit ID to roll back to
Context	rollback commit-id number
Tree	commit-id
Range	1 to 4294967295
Notes	The following elements are part of a choice: commit-id or rollback-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Previous configuration to roll back to
Context	rollback [rollback-id] (keyword number)
Tree	[rollback-id]
Range	0 to 200
Options	startup – Configuration loaded when the system boots
Notes	The following elements are part of a choice: commit-id or rollback-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update

Synopsis	Update the candidate baseline
Context	update
Tree	update
Introduced	25.3.R4

Platforms 7705 SAR Gen 2

/configure

Synopsis Update the entire candidate

Context [update /configure](#)

Tree [/configure](#)

Introduced 25.3.R4

Platforms 7705 SAR Gen 2

/bof

Synopsis Update the entire BOF candidate

Context [update /bof](#)

Tree [/bof](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

check

Synopsis Perform dry-run update report without an actual update

Context [update check](#)

Tree [check](#)

Introduced 25.3.R4

Platforms 7705 SAR Gen 2

/debug

Synopsis Update the entire debug candidate

Context [update /debug](#)

Tree [/debug](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

/li

Synopsis	Update the entire LI candidate
Context	update /li
Tree	/li
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate

Synopsis	Validate changes in the candidate configuration
Context	validate
Tree	validate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4 Configuration commands

This section lists MD-CLI configuration commands.

4.1 aaa commands

```

configure
- aaa
- apply-groups reference
- apply-groups-exclude reference
- radius
- coa-port number
- server-policy named-item
- acct-on-off
  - apply-groups reference
  - apply-groups-exclude reference
  - oper-state-change
- apply-groups reference
- apply-groups-exclude reference
- description description
- servers
  - access-algorithm keyword
  - buffering
    - acct-interim
      - lifetime number
      - max number
      - min number
    - acct-start
      - lifetime number
      - max number
      - min number
    - acct-stop
      - lifetime number
      - max number
      - min number
  - hold-down-time number
  - ipv6-source-address ipv6-address
  - retry-count number
  - router-instance string
  - server number
    - apply-groups reference
    - apply-groups-exclude reference
    - server-name named-item
  - source-address ipv4-address
  - stickiness boolean
  - timeout number

```


4.1.1 aaa command descriptions

aaa	
Synopsis	Enter the aaa context
Context	configure aaa
Tree	aaa
Description	Commands in this context configure authentication, authorization, and accounting. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius	
Synopsis	Enter the radius context
Context	configure aaa radius
Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

coa-port <i>number</i>	
Synopsis	RADIUS listening port for CoA and Disconnect messages
Context	configure aaa radius coa-port <i>number</i>
Tree	coa-port
Description	This command configures the system-wide UDP port number that RADIUS is listening on for CoA and Disconnect messages. (none)
Range	1647 1700 1812 3799
Default	3799
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-policy [*name*] *named-item*

Synopsis	Enter the server-policy list instance
Context	configure aaa radius server-policy <i>named-item</i>
Tree	server-policy
Description	<p>Commands in this context create a RADIUS server policy.</p> <p>A RADIUS server policy can be used in:</p> <ul style="list-style-type: none"> • radius-proxy, for applications like EAP authentication for WIFI access • authentication policy, for Enhanced Subscriber Management authentication • RADIUS accounting policy, for Enhanced Subscriber Management accounting • dynamic data service RADIUS accounting • AAA route downloader <p>(none)</p>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	RADIUS server policy name
Context	configure aaa radius server-policy <i>named-item</i>
Tree	server-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

acct-on-off

Synopsis	Enable the acct-on-off context
Context	configure aaa radius server-policy <i>named-item</i> acct-on-off
Tree	acct-on-off
Description	Commands in this context control the sending of Accounting-On and Accounting-Off messages and the acct-on-off oper-state of the radius-server-policy:

- **acct-on-off**: enables the sending of Accounting-On and Accounting-Off messages for this radius-server-policy. The acct-on-off oper-state is always not blocked.
- **acct-on-off oper-state-change**: enables the sending of Accounting-On and Accounting-Off messages for this radius-server-policy. The acct-on-off oper-state is function of the Accounting-response received for the Accounting-On and Accounting-Off. Optionally, sets the acct-on-off oper-state of the acct-on-off-group.
- **acct-on-off monitor**: no Accounting-On and Accounting-Off messages are sent for this radius-server-policy. The acct-on-off oper-state is inherited from the acct-on-off-group.

(none)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

oper-state-change

Synopsis Enable the **oper-state-change** context

Context **configure** [aaa radius server-policy](#) *named-item* [acct-on-off oper-state-change](#)

Tree [oper-state-change](#)

Notes The following elements are part of a choice: **monitor** or **oper-state-change**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [aaa radius server-policy](#) *named-item* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

servers

Synopsis Enter the **servers** context

Context **configure** [aaa radius server-policy](#) *named-item* [servers](#)

Tree [servers](#)

Description	Commands in this context configure RADIUS server policy command options. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access-algorithm *keyword*

Synopsis	Algorithm to select a RADIUS server from the pool
Context	configure aaa radius server-policy <i>named-item</i> servers access-algorithm <i>keyword</i>
Tree	access-algorithm
Options	direct, round-robin, hash-based
Default	direct
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

buffering

Synopsis	Enter the buffering context
Context	configure aaa radius server-policy <i>named-item</i> servers buffering
Tree	buffering
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

acct-interim

Synopsis	Enable the acct-interim context
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-interim
Tree	acct-interim
Description	<p>Commands in this context enable RADIUS accounting interim update message buffering.</p> <ol style="list-style-type: none"> 1. The message is stored in the buffer, a lifetime timer is started and the message is sent to the RADIUS server 2. If after <i>retry*timeout</i> seconds no RADIUS accounting response is received for the interim update then a new attempt to send the message is started after <i>minimum[(min-val*2n), max-val]</i> seconds. 3. Repeat step 2 until one of the following occurs:

- a RADIUS accounting response is received
- the lifetime of the buffered message expires
- a new RADIUS accounting interim-update or a RADIUS accounting stop for the same accounting session ID and radius-server-policy is stored in the buffer
- the message is manually purged from the message buffer via a **clear** command
- The message is purged from the buffer.

(none)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lifetime *number*

Synopsis Time accounting message can be in retransmission buffer

Context **configure** [aaa radius server-policy](#) *named-item* [servers buffering acct-interim lifetime](#) *number*

Tree [lifetime](#)

Range 1 to 25

Units hours

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max *number*

Synopsis Maximum time between accounting message resend attempts

Context **configure** [aaa radius server-policy](#) *named-item* [servers buffering acct-interim max](#) *number*

Tree [max](#)

Range 1 to 3600

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

min number

Synopsis	Minimum time between accounting message resend attempts
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-interim min number
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

acct-start

Synopsis	Enable the acct-start context
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-start
Tree	acct-start
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lifetime number

Synopsis	Time accounting message can be in retransmission buffer
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-start lifetime number
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max number

Synopsis	Maximum time between accounting message resend attempts
----------	---

Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-start max <i>number</i>
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min *number*

Synopsis	Minimum time between accounting message resend attempts
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-start min <i>number</i>
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

acct-stop

Synopsis	Enable the acct-stop context
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-stop
Tree	acct-stop
Description	<p>Commands in this context enable RADIUS accounting stop message buffering.</p> <ol style="list-style-type: none">1. The message is stored in the buffer, a lifetime timer is started and the message is sent to the RADIUS server2. If after <i>retry*timeout</i> seconds no RADIUS accounting response is received for the accounting stop, then a new attempt to send the message is started after <i>minimum[(min-val*2n), max-val]</i> seconds.3. Repeat step 2 until one of the following occurs:<ul style="list-style-type: none">• a RADIUS accounting response is received• the lifetime of the buffered message expires• The message is manually purged from the message buffer via a clear command.• The message is purged from the buffer. <p>(none)</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lifetime *number*

Synopsis	Time accounting message can be in retransmission buffer
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-stop lifetime <i>number</i>
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max *number*

Synopsis	Maximum time between accounting message resend attempts
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-stop max <i>number</i>
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min *number*

Synopsis	Minimum time between accounting message resend attempts
Context	configure aaa radius server-policy <i>named-item</i> servers buffering acct-stop min <i>number</i>
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

hold-down-time *number*

Synopsis	Hold time before reusing a RADIUS server that was down
Context	configure aaa radius server-policy <i>named-item</i> servers hold-down-time <i>number</i>
Tree	hold-down-time
Description	This command configures the interval during which no new communication attempts are made to a RADIUS server that is marked down to prevent immediately overloading the server when it is starting up. The only exception is when all servers in the authentication policy are marked down; in that case, they will all be used again to prevent failures on new client connections. (none)
Range	30 to 86400
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-source-address *ipv6-address*

Synopsis	Source address for IPv6 RADIUS datagrams
Context	configure aaa radius server-policy <i>named-item</i> servers ipv6-source-address <i>ipv6-address</i>
Tree	ipv6-source-address
Description	This command configures the source address of an IPv6 RADIUS packet. When ipv6-source-address is unconfigured, the system IPv6 address (inband RADIUS server connection) or Boot Option File (BOF) IPv6 address (outband RADIUS server connection) must be configured in order for the RADIUS client to work with an IPv6 RADIUS server. This address is also used in the NAS-IPv6-Address attribute. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-count *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	configure aaa radius server-policy <i>named-item</i> servers retry-count <i>number</i>
Tree	retry-count
Description	This command configures the number of times the router attempts to contact the RADIUS server, if not successful the first time. (none)
Range	1 to 256
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	RADIUS routing instance
Context	configure aaa radius server-policy <i>named-item</i> servers router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the virtual router instance applicable for the set of configured RADIUS servers. This value cannot be changed once a RADIUS server is configured for this policy. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[server-index](#)] *number*

Synopsis	Enter the server list instance
Context	configure aaa radius server-policy <i>named-item</i> servers server <i>number</i>
Tree	server
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[server-index] *number*

Synopsis	RADIUS server index
Context	configure <i>aaa radius server-policy</i> <i>named-item</i> <i>servers server</i> <i>number</i>
Tree	<i>server</i>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-name *named-item*

Synopsis	RADIUS server name
Context	configure <i>aaa radius server-policy</i> <i>named-item</i> <i>servers server</i> <i>number</i> <i>server-name</i> <i>named-item</i>
Tree	<i>server-name</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address *ipv4-address*

Synopsis	Source address of RADIUS messages
Context	configure <i>aaa radius server-policy</i> <i>named-item</i> <i>servers source-address</i> <i>ipv4-address</i>
Tree	<i>source-address</i>
Description	<p>This command configures the source address of the RADIUS packet. The system IP address must be configured in order for the RADIUS client to work.</p> <p>The system IP address must only be configured if the source-address is not specified. When the no source-address command is executed, the source address is determined at the moment the request is sent. This address is also used in the NAS-IP-Address attribute; over there it is set to the system IP address if no source-address was given.</p> <p>(none)</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

stickiness *boolean*

Synopsis Allow stickiness in a multi-server application
Context **configure** [aaa radius server-policy](#) *named-item* [servers stickiness](#) *boolean*
Tree [stickiness](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

Synopsis Time until the next retry to the RADIUS server
Context **configure** [aaa radius server-policy](#) *named-item* [servers timeout](#) *number*
Tree [timeout](#)
Range 1 to 340
Units seconds
Default 5
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

4.2 bfd commands

```
configure
-  bfd
  -  apply-groups reference
  -  apply-groups-exclude reference
  -  bfd-template named-item
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  echo-receive number
    -  multiplier number
    -  receive-interval number
    -  transmit-interval number
    -  type keyword
```

4.2.1 bfd command descriptions

bfd

Synopsis	Enter the bfd context
Context	configure bfd
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template [**name**] *named-item*

Synopsis	Enter the bfd-template list instance
Context	configure bfd bfd-template <i>named-item</i>
Tree	bfd-template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	BFD template name
Context	configure bfd bfd-template <i>named-item</i>
Tree	bfd-template
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Echo receive interval
Context	configure bfd bfd-template <i>named-item</i> echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000

Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Detection multiplier
Context	configure bfd bfd-template <i>named-item</i> multiplier <i>number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive-interval *number*

Synopsis	Receive interval
Context	configure bfd bfd-template <i>named-item</i> receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval
Context	configure bfd bfd-template <i>named-item</i> transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

type *keyword*

Synopsis Local termination point for the BFD session
Context **configure** *bfd bfd-template named-item type keyword*
Tree *type*
Options cpm-np, fp
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

4.3 bof commands

```

bof
- auto-boot
- dhcp
  - client-id (keyword | hex-string | string)
  - inband
    - disabled boolean
    - null-encapsulation boolean
    - vlan number
    - vlan-discovery boolean
  - include-user-class boolean
  - ipv4 boolean
  - ipv6 boolean
  - management-port boolean
  - secure boolean
- ospf
  - mtu number
  - neid hex-string
  - neip-ipv4 ipv4-unicast-address
  - neip-ipv6 ipv6-address
  - vendor-id number
  - port-mtu number
  - timeout number
- auto-configure
- ipv4
  - dhcp
    - client-id (hex-string | string)
    - include-user-class boolean
    - timeout number
- ipv6
  - dhcp
    - client-id (hex-string | string)
    - client-type keyword
    - include-user-class boolean
    - timeout number
- configuration
  - encrypt boolean
  - encryption-key bof-static-encrypted-leaf
  - password hashed-leaf
  - primary-location bof-cflash-and-url
  - secondary-location bof-cflash-and-url
  - tertiary-location bof-cflash-and-url
- console
  - speed number
  - wait-time number
- dns
  - domain string
  - primary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - tertiary-server (ipv4-address-no-zone | ipv6-address-no-zone)
- image
  - primary-location bof-cflash-and-url
  - secondary-location bof-cflash-and-url
  - tertiary-location bof-cflash-and-url
- license
  - primary-location bof-cflash-and-url
- port named-item-64
  - autonegotiate keyword
  - duplex keyword
  - speed number

```

bof router

```
- router named-item-64
- interface interface-name
  - cpm keyword
  - ipv4
    - ip-address ipv4-unicast-address
    - prefix-length number
  - ipv6
    - ipv6-address ipv6-address
    - prefix-length number
  - ip-mtu number
  - static-routes
    - route (ipv4-prefix | ipv6-prefix)
      - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- system
  - base-mac-address mac-unicast-address
  - persistent-indices boolean
  - profile keyword
```

4.3.1 bof command descriptions

bof

Synopsis	Configure system boot options
Context	bof
Tree	bof
Description	<p>This command creates or edits the boot option file (BOF) for the specified local storage device.</p> <p>A BOF file specifies where the system searches for runtime images, configuration files, and other operational parameters during system initialization.</p> <p>BOF parameters can be modified. Changes can be saved to a specified compact flash. The BOF must be located in the root directory of either an internal or external compact flash local to the system and have the mandatory filename of bof.cfg.</p> <p>When modifications are made to in-memory parameters that are currently in use or operating, the changes are effective immediately. For example, if the IP address of the management port is changed, the change takes place immediately.</p> <p>Only one entry of the BOF configuration command statement can be saved once the statement has been found to be syntactically correct.</p> <p>When opening an existing BOF that is not the BOF used in the most recent boot, a message is issued notifying the user that the parameters will not affect the operation of the node.</p> <p>No default boot option file exists. The router boots with the factory default boot sequence and options.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-boot

	<p>Note: The new value of this element takes effect when the router boots.</p>
Synopsis	Enable the auto-boot context
Context	bof auto-boot
Tree	auto-boot
Description	<p>Commands in this context enable the auto-boot flag in the BOF and configures the auto-boot options for ZTP. When modifying auto-boot options using CLI, all required options must be explicitly configured as the default cases will no longer be used.</p> <p>(none)</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-boot dhcp
Tree	dhcp
Description	Commands in this context configure the IPv4 DHCP client for OOB management. The OOB management IPv4 can be set using a DHCP server offer. (none)
Notes	The following elements are part of a choice: dhcp or ospf .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-id (*keyword* | *hex-string* | *string*)



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-boot dhcp client-id (<i>keyword</i> <i>hex-string</i> <i>string</i>)
Tree	client-id
Description	This command specifies the client ID for IPv4 Option 61 for auto-discovery. The identifier is opaque and is in string format. By default, this is the chassis serial number. (none)
String length	3 to 118 (<i>hex-string</i>) 1 to 58 (<i>string</i>)
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Options	use-chassis-mac-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inband



Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the inband context
Context	bof auto-boot dhcp inband
Tree	inband
Description	Commands in this context enable in-band management through an Ethernet port for ZTP. Unless the vlan-discovery command is used, the inband command disables VLAN discovery. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

disabled *boolean*



Note:
The new value of this element takes effect when the router boots.

Synopsis	Do not use in-band ports
Context	bof auto-boot dhcp inband disabled <i>boolean</i>
Tree	disabled
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

null-encapsulation *boolean*



Note:
The new value of this element takes effect when the router boots.

Synopsis	Use null encapsulation
Context	bof auto-boot dhcp inband null-encapsulation <i>boolean</i>
Tree	null-encapsulation

Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan *number*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	In-band VLAN ID
Context	bof auto-boot dhcp inband vlan <i>number</i>
Tree	vlan
Range	1 to 4094
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-discovery *boolean*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use VLAN discovery
Context	bof auto-boot dhcp inband vlan-discovery <i>boolean</i>
Tree	vlan-discovery
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-user-class *boolean*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class in auto boot provisioning
Context	bof auto-boot dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Description	When configured to true , the router includes Option 77 in DHCP messages. (none)
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv4
Context	bof auto-boot dhcp ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv6
Context	bof auto-boot dhcp ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	25.3.R2

Platforms7705 SAR Gen 2

management-port boolean



Note:
The new value of this element takes effect when the router boots.

Synopsis	Use auto boot on the management port
Context	bof auto-boot dhcp management-port boolean
Tree	management-port
Description	When configured to true , the out-of-band management port is used for ZTP. (none)
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secure boolean



Note:
The new value of this element takes effect when the router boots.

Synopsis	Use Secure ZTP for auto-boot
Context	bof auto-boot dhcp secure boolean
Tree	secure
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

ospf



Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the ospf context
Context	bof auto-boot ospf
Tree	ospf

Description	Commands in this context configure OSPF auto-discovery. (none)
Notes	The following elements are part of a choice: dhcp or ospf .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu number

	Note: The new value of this element takes effect when the router boots.
Synopsis	OSPF MTU
Context	bof auto-boot ospf mtu number
Tree	mtu
Range	512 to 9786
Units	bytes
Default	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neid hex-string

	Note: The new value of this element takes effect when the router boots.
Synopsis	Network element ID
Context	bof auto-boot ospf neid hex-string
Tree	neid
Description	This command specifies a hexadecimal network element identification string. (none)
String length	3
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neip-ipv4 *ipv4-unicast-address*

**Note:**
The new value of this element takes effect when the router boots.

Synopsis

Network element IPv4 address

Context

[bof auto-boot ospf neip-ipv4](#) *ipv4-unicast-address*

Tree

[neip-ipv4](#)

String format

'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced

25.3.R2

Platforms

7705 SAR Gen 2

neip-ipv6 *ipv6-address*

**Note:**
The new value of this element takes effect when the router boots.

Synopsis

Network element IPv6 address

Context

[bof auto-boot ospf neip-ipv6](#) *ipv6-address*

Tree

[neip-ipv6](#)

Introduced

25.3.R2

Platforms

7705 SAR Gen 2

vendor-id *number*

**Note:**
The new value of this element takes effect when the router boots.

Synopsis

Vendor ID

Context

[bof auto-boot ospf vendor-id](#) *number*

Tree

[vendor-id](#)

Description

This command specifies the vendor identification number. The number 140 corresponds to "Nokia".
(none)

Range

1 to 254

Default

140

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-mtu *number*



Note:
The new value of this element takes effect when the router boots.

Synopsis	Port MTU setting
Context	bof auto-boot port-mtu <i>number</i>
Tree	port-mtu
Range	512 to 9800
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*



Note:
The new value of this element takes effect when the router boots.

Synopsis	ZTP timeout
Context	bof auto-boot timeout <i>number</i>
Tree	timeout
Description	This command configures the Zero Touch Provisioning timeout, which is the total time allowed for the ZTP process to execute successfully. If the ZTP process is unsuccessful (in the case of auto-boot using OSPF, if no OSPF adjacency is found), the node is first rebooted, then the ZTP process is retried.
Range	30 to 1440
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-configure

Synopsis	Enter the auto-configure context
Context	bof auto-configure

Tree	auto-configure
Description	Commands in this context autoconfigure the IP address for the BOF. The IPv4 DHCP client, IPv6 DHCP client, and NDP/RA can be configured on the management interface. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	bof auto-configure ipv4
Tree	ipv4
Description	Commands in this context autoconfigure the IPv4 DHCP client. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

**Note:**
The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-configure ipv4 dhcp
Tree	dhcp
Description	Commands in this context configure the IPv4 DHCP client for OOB management. The OOB management IPv4 can be set using a DHCP server offer. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-id (*hex-string* | *string*)

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

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv4 dhcp client-id (<i>hex-string</i> <i>string</i>)
Tree	client-id
Description	This command configures the client ID for IPv4 Option 61 for auto-discovery. The identifier is opaque and is in string format. By default, this is the chassis serial number. (none)
String length	3 to 256 (<i>hex-string</i>) 1 to 127 (<i>string</i>)
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-user-class *boolean***WARNING:**

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

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv4 dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number***WARNING:**

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



Note:
The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv4 dhcp timeout <i>number</i>
Tree	timeout
Range	1 to 65535
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	bof auto-configure ipv6
Tree	ipv6
Description	Commands in this context autoconfigure the IPv6 DHCP client. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp



Note:
The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-configure ipv6 dhcp
Tree	dhcp
Description	Commands in this context configure the IPv6 DHCP client for OOB management. The OOB management IPv6 can be set using a DHCP server offer. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-id (*hex-string* | *string*)

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

 **Note:**
The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv6 dhcp client-id (<i>hex-string</i> <i>string</i>)
Tree	client-id
Description	This command specifies the client ID for IPv6 DHCP Option 1 to include for auto-discovery. The identifier is opaque and is in string format. By default, this is the chassis serial number. (none)
String length	3 to 250 (<i>hex-string</i>) 1 to 124 (<i>string</i>)
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-type *keyword*

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

 **Note:**
The new value of this element takes effect when the router boots.

Synopsis	Type code of the server DUID
Context	bof auto-configure ipv6 dhcp client-type <i>keyword</i>
Tree	client-type
Options	duid-enterprise, duid-link-local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-user-class *boolean*

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

**Note:**
The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv6 dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

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

**Note:**
The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv6 dhcp timeout <i>number</i>
Tree	timeout
Range	1 to 65535
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configuration

Synopsis	Enter the configuration context
Context	bof configuration

Tree	configuration
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encrypt *boolean*



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enable encryption of BOF configuration files
Context	bof configuration encrypt <i>boolean</i>
Tree	encrypt
Description	<p>When configured to true, this command enables encryption of the BOF using AES256 and SHA256.</p> <p>When the BOF is encrypted on the compact flash, it is still reachable using the BOF interactive menu during node startup, and fields can be modified using the BOF interactive menu.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-key *bof-static-encrypted-leaf*



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Secret key for encryption of configuration files
Context	bof configuration encryption-key <i>bof-static-encrypted-leaf</i>
Tree	encryption-key
Description	<p>This command creates a key to be used for AES256 encryption of the configuration file. This key is used for all configuration files (primary, secondary, and tertiary).</p> <p>After creating or deleting a key, save the configuration file so that it is encrypted with the latest key.</p> <p>The output of the encryption key is always in a protected format.</p> <p>Plaintext keys must be 8 to 32 characters in length.</p>
String length	1 to 126
Introduced	25.3.R2

Platforms7705 SAR Gen 2

password hashed-leaf



Note:
The new value of this element takes effect when the router boots.

Synopsis	Password for boot-time modification of boot options
Context	bof configuration password hashed-leaf
Tree	password
Description	<p>This command configures the password to access the BOF interactive menu at startup.</p> <p>If a password is configured, the BOF interactive menu is accessible only when the correct password is entered. If the correct password is not entered in 30 seconds, the node reboots.</p> <p>The output of the password is always in a protected format.</p> <p>This command accepts a cleartext format of 8 to 32 characters or a protected pbkdf2-sha3-512 format.</p>
String length	8 to 136
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-location bof-cflash-and-url



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Primary configuration location
Context	bof configuration primary-location bof-cflash-and-url
Tree	primary-location
String length	1 to 199
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary-location bof-cflash-and-url



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary configuration location
Context	bof configuration secondary-location <i>bof-cflash-and-url</i>
Tree	secondary-location
String length	1 to 199
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tertiary-location *bof-cflash-and-url*



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary configuration location
Context	bof configuration tertiary-location <i>bof-cflash-and-url</i>
Tree	tertiary-location
Description	<p>This command specifies the name and location of the tertiary configuration file.</p> <p>The system attempts to use the configuration specified in tertiary-location if both the primary and secondary configuration files cannot be located. If this file cannot be located, the system boots with the factory default configuration.</p> <p>Note that if an error in the configuration file is encountered, the boot process aborts.</p> <p>(none)</p>
String length	1 to 199
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console

Synopsis	Enter the console context
Context	bof console
Tree	console
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

speed *number*

 **Note:**
The new value of this element takes effect when the candidate is committed.

Synopsis	Console port speed
Context	bof console speed <i>number</i>
Tree	speed
Description	<p>This command configures the console port baud rate.</p> <p>When this command is issued while editing the BOF file used for the most recent boot, both the BOF file and the active configuration are changed immediately.</p> <p>(none)</p>
Range	9600 19200 38400 57600 115200
Units	bps
Default	115200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wait-time *number*

 **Note:**
The new value of this element takes effect when the router boots.

Synopsis	Wait time for interrupt to change boot parameters
Context	bof console wait-time <i>number</i>
Tree	wait-time
Range	1 to 10
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns

Synopsis	Enter the dns context
Context	bof dns

Tree	dns
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain string



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	System DNS domain name for DNS address resolution
Context	bof dns domain string
Tree	domain
String length	1 to 178
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-server (ipv4-address-no-zone | ipv6-address-no-zone)



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Primary DNS server
Context	bof dns primary-server (ipv4-address-no-zone ipv6-address-no-zone)
Tree	primary-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary DNS server
Context	bof dns secondary-server (ipv4-address-no-zone ipv6-address-no-zone)
Tree	secondary-server
Introduced	25.3.R2

Platforms7705 SAR Gen 2

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

 **Note:**
The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary DNS server
Context	bof dns tertiary-server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	tertiary-server
Description	<p>This command configures the tertiary DNS server for DNS name resolution. The tertiary DNS server is used only if the primary DNS server and the secondary DNS server do not respond.</p> <p>DNS name resolution can be used when executing ping, traceroute, and service-ping, and also when defining file URLs. DNS name resolution is not supported when DNS names are embedded in configuration files.</p> <p>(none)</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

image

Synopsis	Enter the image context
Context	bof image
Tree	image
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-location *bof-cflash-and-url*

 **Note:**
The new value of this element takes effect when the router boots.

Synopsis	Primary image location
Context	bof image primary-location <i>bof-cflash-and-url</i>
Tree	primary-location
String length	1 to 199

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary-location *bof-cflash-and-url*



Note:
The new value of this element takes effect when the router boots.

Synopsis	Secondary image location
Context	bof image secondary-location <i>bof-cflash-and-url</i>
Tree	secondary-location
String length	1 to 199
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tertiary-location *bof-cflash-and-url*



Note:
The new value of this element takes effect when the router boots.

Synopsis	Tertiary image location
Context	bof image tertiary-location <i>bof-cflash-and-url</i>
Tree	tertiary-location
String length	1 to 199
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

license

Synopsis	Enter the license context
Context	bof license
Tree	license
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-location *bof-cflash-and-url*



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Primary license file location
Context	bof license primary-location <i>bof-cflash-and-url</i>
Tree	primary-location
String length	1 to 199
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [[router-name](#)] *named-item-64*



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the port list instance
Context	bof port <i>named-item-64</i>
Tree	port
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-name] *named-item-64*

Synopsis	Administrative router name
Context	bof port <i>named-item-64</i>
Tree	port
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character 'router-name' must be 'management'
MD-CLI default	management
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

autonegotiate *keyword*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Auto-negotiate speed and duplex type on Ethernet port
Context	bof port named-item-64 autonegotiate <i>keyword</i>
Tree	autonegotiate
Options	false, true
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplex *keyword*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Duplex type for the Ethernet port
Context	bof port named-item-64 duplex <i>keyword</i>
Tree	duplex
Options	full, half
Default	full
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

speed *number*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Speed of the Ethernet port
Context	bof port named-item-64 speed <i>number</i>
Tree	speed

Range	10 100 1000
Units	megabps
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router [router-name] *named-item-64*



Note:
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the router list instance
Context	bof router <i>named-item-64</i>
Tree	router
Description	This command creates a router instance which represents a virtual router in the system. There will always be at least two instances in the system. The Base or transport router and the management router are created when the system is initialized and cannot be deleted.
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-name] *named-item-64*

Synopsis	Administrative router name
Context	bof router <i>named-item-64</i>
Tree	router
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character 'router-name' must be 'management'
MD-CLI default	management
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name***Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the interface list instance
Context	bof router <i>named-item-64</i> interface <i>interface-name</i>
Tree	interface
Description	Commands in this context create a logical IP routing or unnumbered MPLS-TP interface. Once created, an IP address, port, or system can be associated with the IP interface.
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	bof router <i>named-item-64</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
String format	'interface-name' must be 'management'
MD-CLI default	management
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpm [[cpm-type](#)] *keyword***Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the cpm list instance
Context	bof router <i>named-item-64</i> interface <i>interface-name</i> cpm <i>keyword</i>
Tree	cpm
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[cpm-type] keyword

Synopsis CPM type

Context [bof router](#) [named-item-64](#) [interface](#) [interface-name](#) [cpm](#) keyword

Tree [cpm](#)

Options active, standby, a, b, c, d

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis Enable the **ipv4** context

Context [bof router](#) [named-item-64](#) [interface](#) [interface-name](#) [cpm](#) keyword [ipv4](#)

Tree [ipv4](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-address *ipv4-unicast-address*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis IPv4 address assigned to the interface

Context [bof router](#) [named-item-64](#) [interface](#) [interface-name](#) [cpm](#) keyword [ipv4](#) [ip-address](#) [ipv4-unicast-address](#)

Tree [ip-address](#)

Description This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is mandatory.

Introduced25.3.R2

Platforms7705 SAR Gen 2

prefix-length *number*

 **Note:**
The new value of this element takes effect when the candidate is committed.

SynopsisIPv4 address prefix length

Context**bof router** *named-item-64* **interface** *interface-name* **cpm** *keyword* **ipv4** **prefix-length** *number*

Tree**prefix-length**

Range0 to 32

NotesThis element is mandatory.

Introduced25.3.R2

Platforms7705 SAR Gen 2

ipv6

 **Note:**
The new value of this element takes effect when the candidate is committed.

SynopsisEnable the **ipv6** context

Context**bof router** *named-item-64* **interface** *interface-name* **cpm** *keyword* **ipv6**

Tree**ipv6**

Introduced25.3.R2

Platforms7705 SAR Gen 2

ipv6-address *ipv6-address*

 **Note:**
The new value of this element takes effect when the candidate is committed.

SynopsisIPv6 address assigned to the interface

Context**bof router** *named-item-64* **interface** *interface-name* **cpm** *keyword* **ipv6** **ipv6-address** *ipv6-address*

Tree**ipv6-address**

Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address prefix length
Context	bof router named-item-64 interface interface-name cpm keyword ipv6 prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 128
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-mtu *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Interface IP MTU
Context	bof router named-item-64 interface interface-name ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command configures the MTU for IP packets transmitted out the interface of the management router instance associated to the management port.</p> <p>The operational MTU for the port is set to the lesser of the values configured with this command and the management port MTU.</p> <p>If the interface supports IPv6 packets, the command value must be set to 1280 or higher.</p>
Range	512 to 9786
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-routes

Synopsis	Enter the static-routes context
Context	bof router <i>named-item-64</i> static-routes
Tree	static-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

 **Note:**
The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the route list instance
Context	bof router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the static route
Context	bof router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	route
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

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

 **Note:**
The new value of this element takes effect when the candidate is committed.

Synopsis	Next-hop IP address
Context	bof router named-item-64 static-routes route (<i>ipv4-prefix ipv6-prefix</i>) next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
Context	bof system
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

base-mac-address *mac-unicast-address*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Base system MAC address
Context	bof system base-mac-address <i>mac-unicast-address</i>
Tree	base-mac-address
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

persistent-indices *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Classic and mixed management mode persistent indices
Context	bof system persistent-indices <i>boolean</i>
Tree	persistent-indices

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*



Note:
The new value of this element takes effect when the router boots.

Synopsis	System capabilities profile
Context	bof system profile <i>keyword</i>
Tree	profile
Options	profile-a, profile-b
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.4 card commands

```

configure
- card number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- card-type keyword
- fail-on-error boolean
- fp number
- apply-groups reference
- apply-groups-exclude reference
- egress
- ingress
- access
  - queue-group reference instance-id number
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - description description
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-threshold-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
      - policy-name reference
  - policer-overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
- dist-cpu-protection
- dynamic-enforcement-policer-pool number
- network
- pool named-item
  - apply-groups reference
  - apply-groups-exclude reference
- queue-group reference instance-id number
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description description
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - max-rate (number | keyword)

```

configure card fp ingress network queue-group policer-control-policy overrides priority-mbs-thresholds

```

    - priority-mbs-thresholds
      - min-threshold-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
      - policy-name reference
    - policer-overrides
      - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue-policy reference
    - init-extract-prio-mode keyword
  - mda number
    - access
      - apply-groups reference
      - apply-groups-exclude reference
    - egress
      - apply-groups reference
      - apply-groups-exclude reference
    - ingress
      - apply-groups reference
      - apply-groups-exclude reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - event keyword
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - fail-on-error boolean
    - ingress
      - pre-classifier
        - dot1p-for-untagged-traffic number
        - policy-name reference
    - mda-type keyword
    - network
      - apply-groups reference
      - apply-groups-exclude reference
    - egress
      - apply-groups reference
      - apply-groups-exclude reference
    - ingress
      - apply-groups reference
      - apply-groups-exclude reference
    - sync-e keyword
    - timestamp-freq number

```

4.4.1 card command descriptions

card [**slot-number**] *number*

Synopsis	Enter the card list instance
Context	configure card <i>number</i>
Tree	card
Description	Commands in this context cover attributes for specific chassis slots for physical cards. On 7705 SAR Gen 2 platforms, the card is provisioned permanently and cannot be modified or removed. See the <i>7705 SAR Gen 2 Interface Configuration Guide</i> for more information.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[slot-number] *number*

Synopsis	Slot number within the chassis
Context	configure card <i>number</i>
Tree	card
Description	This command configures a unique value that identifies the card slot within a chassis in the system.
Range	1 to 20
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the card
Context	configure card <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card-type keyword**WARNING:**

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

Synopsis	Card type
Context	configure card <i>number</i> card-type <i>keyword</i>
Tree	card-type
Description	<p>This command adds an IOM, IMM, XCM to the device configuration for the slot.</p> <p>The card type can be pre-provisioned, meaning that the card does not need to be installed in the chassis.</p> <p>A card must be provisioned before any contained object can be configured: MDA, XIOM, XMA, MDA-s, connector, or port. A card can only be provisioned in a slot if the card type is allowed in the slot. An error message is generated if an attempt is made to provision a card type that is not allowed.</p> <p>If a card is inserted that does not match the configured card type for the slot, a log event and facility alarm is raised. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event and facility alarm are raised if an administratively enabled card is removed from the chassis. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event is issued when a card is removed that is administratively disabled.</p> <p>Because IMM's do not have the capability to install separate MDAs, the configuration of the MDAs is automatic. This configuration only includes the default options such as default buffer policies. Commands to manage the MDA remain in the MDA configuration context.</p> <p>Some card hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two card types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the card occurs when switching between the two provisioned types.</p> <p>An appropriate alarm is raised if a partial or complete card failure is detected. The alarm is cleared when the error condition ceases.</p> <p>On 7705 SAR Gen 2 platforms, the card is provisioned permanently and cannot be modified or removed. See the <i>7705 SAR Gen 2 Interface Configuration Guide</i> for more information.</p>
Options	xcm-x20, imm40-10gb-sfp, iom4-e, iom-a, imm-2pac-fp3, iom4-e-hs, imm4-100gb-cfp4, iom-e, iom-v, iom4-e-b, iom-sar-hm, xcm2-x20, iom-1, xcm-14s, imm40-10gb-sfp-ptp, iom-ixr-r6, imm36-100g-qsfp28, imm48-sfp+2-qsfp28, iom5-e, xcm-7s, imm48-sfp++6-qsfp28, xcm-1s, xcm-2s, imm24-sfp++8-sfp28+2-qsfp28, iom-sar-hmc, imm14-10g-sfp++4-1g-tx, iom-ixr-r4, imm6-qsfpdd+48-sfp56, imm32-qsfp28+4-qsfpdd, i48-800g-qsfpdd-1x, imm36-qsfpdd,

imm4-1g-tx+20-1g-sfp+6-10g-sfp+, iom-ixr-r6d, xcm2-7s, i24-800g-qsfpdd-1, imm36-800g-qsfpdd, xcm2-14s, i48-400g-qsfpdd-1, i80-200g-sfpdd+12-400g-qsfpdd-1, i40-200g-sfpdd+6-800g-qsfpdd-1, i80-200g-sfpdd+12-800g-qsfpdd-1x, xcm-2se, xcm-14s-b, xcm-7s-b, imm2-qsfpdd+2-qsfp28+24-sfp28, xcmc-2se, imm12-sfp28+2-qsfp28, dms24-800g-qsfpdd-1, imm16-sfp112+15-sfp56+6-qsfpdd, imm8-sfp112+18-sfp28+2-qsfpdd, iom-sar, imm4-qsfp28+16-sfp28+8-sfp56, iom-sar-1x, imm4-sfp+4-sfp+, imm4-sfp+4-sfp+-s, imm16-sfp++4-sfp28

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fail-on-error *boolean*

Synopsis Set operational state of the card to Failed upon error

Context **configure** *card number* **fail-on-error** *boolean*

Tree **fail-on-error**

Description When configured to **true**, this command controls the behavior of the card when any one of a specific set of card level errors is encountered in the system.

When this command is set to **true**, and any one (or more) of the specific errors is detected, the operational state of the card is set to failed. This failed state persists until the **clear card** command is issued (reset) or the card is removed and reinserted (reseated). If the condition persists after reseating the card, contact Nokia support to investigate more.

Nokia only recommends configuring this command to **true** when the network is designed to be able to route traffic around a failed card (redundant cards, nodes, or other paths exist).

The list of specific errors includes the following:

CHASSIS event ID# 2063 - tmnxEqCardPChipMemoryEvent

CHASSIS event ID# 2076 - tmnxEqCardPChipCamEvent

CHASSIS event ID# 2059 - tmnxEqCardPChipError (for ingress Ethernet only)

CHASSIS event ID# 2098 - tmnxEqCardQChipBufMemoryEvent

CHASSIS event ID# 2099 - tmnxEqCardQChipStatsMemoryEvent

CHASSIS event ID# 2101 - tmnxEqCardQChipIntMemoryEvent

CHASSIS event ID# 2103 - tmnxEqCardChipIfCellEvent

On platforms with integrated CPM and IOM, IMM, or XCM, the node is rebooted if this command is set to **true** and one of the card level errors is encountered. The tmnxEqCardPChipError is only considered as a trigger for this command for ingress FCS errors (not egress FCS errors).

Note: On the detection of the event or error in the system, the reporting of the event (logs) and the fail-on-error behavior of the card are independent. Log event control configuration determines whether the events are reported in logs (or SNMP traps, and so on) and the fail-on-error configuration determines the behavior of the card. This implies that the card can be configured to fail-on-error even if the events are suppressed

(some may be suppressed in the system by default). To facilitate post-failure analysis, Nokia recommends reporting the specific events or errors and that **configure log log-events** be enabled when this command is set to **true**.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp *[fp-number] number*

Synopsis	Enter the fp list instance
Context	configure card number fp number
Tree	fp
Description	Commands in this context configure forwarding plane (FP) specific options on the card.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fp-number] *number*

Synopsis	Forwarding plane within the card
Context	configure card number fp number
Tree	fp
Range	1 to 12
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure card number fp number egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure <i>card number fp number ingress</i>
Tree	<i>ingress</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access

Synopsis	Enter the access context
Context	configure <i>card number fp number ingress access</i>
Tree	<i>access</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group [*queue-group-name*] *reference instance-id number*

Synopsis	Enter the queue-group list instance
Context	configure <i>card number fp number ingress access queue-group reference instance-id number</i>
Tree	<i>queue-group</i>
Description	Commands in this context create a named queue group template on the ingress forwarding plane of an IOM or IMM.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-group-name] reference

Synopsis	Queue group name
Context	configure <i>card number fp number ingress access queue-group reference instance-id number</i>
Tree	<i>queue-group</i>
Reference	configure <i>qos queue-group-templates ingress queue-group named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

instance-id *number*

Synopsis Instance ID

Context **configure** *card number fp number ingress access queue-group reference instance-id number*

Tree *queue-group*

Range 1 to 65535

MD-CLI default 1

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

accounting-policy *reference*

Synopsis Accounting policy for the FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number accounting-policy reference*

Tree *accounting-policy*

Description This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.

Reference **configure** *log accounting-policy number*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

collect-stats *boolean*

Synopsis Collect statistics on FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number collect-stats boolean*

Tree *collect-stats*

Description When configured to **true**, the system collects accounting and statistical data for the queue group on the FP.

When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.

If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>card number fp number ingress access queue-group reference instance-id number description description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy</i>
Tree	<i>policer-control-policy</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides</i>
Tree	<i>overrides</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum rate override
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-control-policy</i> <i>overrides</i> <i>max-rate</i> (<i>number</i> <i>keyword</i>)
Tree	<i>max-rate</i>
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p> <p>If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-control-policy</i> <i>overrides</i> <i>priority-mbs-thresholds</i>
Tree	<i>priority-mbs-thresholds</i>
Description	Commands in this context configure the derivative for the shared portion and fair portion for each priority level.

The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

min-threshold-separation (*number* | *keyword*)

Synopsis Minimum separation between any two active thresholds

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (number | keyword)*

Tree [min-threshold-separation](#)

Description This command configures the minimum separation between any two active thresholds in the parent policer.

Range 0 to 16777216

Units bytes

Options auto

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority [[level](#)] *number*

Synopsis Enter the **priority** list instance

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[level] *number*

Synopsis Priority level, higher number is stricter

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Range 1 to 8

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	configure card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure card number fp number ingress access queue-group reference instance-id number policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-overrides

Synopsis	Enter the policer-overrides context
Context	configure card number fp number ingress access queue-group reference instance-id number policer-overrides
Tree	policer-overrides

Description	Commands in this context configure specific overrides to one or more policers created on the SAP through SAP ingress QoS policies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [**policer-id**] *reference*

Synopsis	Enter the policer list instance
Context	configure card <i>number</i> fp <i>number</i> ingress access queue-group <i>reference</i> instance-id <i>number</i> policer-overrides policer <i>reference</i>
Tree	policer
Description	<p>Commands in this context create, modify, or delete a policer. Policers are created and used in a similar manner to queues. Unlike queues that have dedicated counters, policers allow various stat-mode settings that define the counters to be associated with the policer. Packet byte offset provides a policer with the ability to modify the size of each packet based on a defined number of bytes. All policers must be created within the QoS policies.</p> <p>After a policer is created, it cannot be deleted from the QoS policy unless all forwarding classes mapped to the policer are first moved to other policers or queues.</p> <p>The system allows a policer to be created on a SAP QoS policy regardless of the ability to support policers on objects where the policy is currently applied. The system only scans the current objects for policer support and sufficient resources to create the policer when a forwarding class is first mapped to the policer ID. If the policer cannot be created because one or more instances of the policy do not support policing or have insufficient resources to create the policer, the forwarding class mapping fails.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *reference*

Synopsis	Policer ID
Context	configure card <i>number</i> fp <i>number</i> ingress access queue-group <i>reference</i> instance-id <i>number</i> policer-overrides policer <i>reference</i>
Tree	policer
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-overrides</i> <i>policer</i> <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Description	<p>This command configures the CIR leaky bucket exceed threshold of the policer.</p> <p>If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>access</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-overrides</i> <i>policer</i> <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Description	<p>This command configures the PIR leaky bucket violate threshold of the policer.</p> <p>Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.</p> <p>If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.</p> <p>The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size adjustment
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	packet-byte-offset
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	rate
Description	<p>Commands in this context configure the metering and optional profiling rates of the policer.</p> <p>The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the policer
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Context	configure <i>card number</i> <i>fp number</i> <i>ingress access queue-group reference instance-id number</i> <i>policer-overrides policer reference rate</i> <i>cir (number keyword)</i>
Tree	<i>cir</i>
Description	<p>This command overrides the default CIR rate of the policer.</p> <p>When the policer is first created, the profiling rate defaults to 0 kb/s.</p> <p>When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.</p>
Range	0 to 20000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number | keyword*)

Synopsis	PIR for the policer
Context	configure <i>card number</i> <i>fp number</i> <i>ingress access queue-group reference instance-id number</i> <i>policer-overrides policer reference rate</i> <i>pir (number keyword)</i>
Tree	<i>pir</i>
Description	<p>This command configures the metering rate of the policer for the PIR leaky bucket.</p> <p>When the policer is first created, the metering rate defaults to max.</p> <p>When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.</p>
Range	1 to 20000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure <i>card number</i> <i>fp number</i> <i>ingress access queue-group reference instance-id number</i> <i>policer-overrides policer reference</i> <i>stat-mode keyword</i>

Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure card <i>number</i> fp <i>number</i> ingress dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure the distributed CPU protection forwarding plane settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-enforcement-policer-pool *number*

Synopsis	Number of policers reserved as enforcement policers use
Context	configure card <i>number</i> fp <i>number</i> ingress dist-cpu-protection dynamic-enforcement-policer-pool <i>number</i>
Tree	dynamic-enforcement-policer-pool
Description	<p>This command reserves a set of policers for use as dynamic enforcement policers for the Distributed CPU Protection (DCP) feature. Policers are allocated from this pool and instantiated as per-object per-protocol dynamic enforcement policers after a local monitor is triggered for an object, such as a SAP or network interface.</p> <p>A change to this configured value automatically clears the high water mark, timestamp, and failed allocation count.</p> <p>If the command is configured to a value below the currently used or allocated number, all dynamic policers are returned to the free pool (and traffic returns to the local monitors).</p>
Range	1000 to 32000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure card <i>number</i> fp <i>number</i> ingress network
Tree	network
Description	Commands in this context configure the IOM ingress network forwarding plane settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [[name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>named-item</i>
Tree	pool
Description	Commands in this context configure the list of forwarding plane ingress network pool settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Network ingress pool name for the FP
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	default
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the queue-group list instance
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Context	configure card number fp number ingress network queue-group reference instance-id number
Tree	queue-group
Description	Commands in this context configure IOM ingress network forwarding plane queue-group settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-group-name] reference

Synopsis	Queue group name
Context	configure card number fp number ingress network queue-group reference instance-id number
Tree	queue-group
Reference	configure qos queue-group-templates ingress queue-group named-item
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance-id number

Synopsis	Instance ID
Context	configure card number fp number ingress network queue-group reference instance-id number
Tree	queue-group
Range	1 to 65535
MD-CLI default	1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy reference

Synopsis	Accounting policy for the FP ingress queue group
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Context	configure <i>card number fp number ingress network queue-group reference instance-id number accounting-policy reference</i>
Tree	<i>accounting-policy</i>
Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	configure <i>log accounting-policy number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	configure <i>card number fp number ingress network queue-group reference instance-id number collect-stats boolean</i>
Tree	<i>collect-stats</i>
Description	<p>When configured to true, the system collects accounting and statistical data for the queue group on the FP.</p> <p>When configured to false, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.</p> <p>If this command is set to true (after it had previously been set to false), the counters written to the billing file include the traffic collected when the command was set to false.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>card number fp number ingress network queue-group reference instance-id number description description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number</i> policer-control-policy
Tree	policer-control-policy
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number</i> policer-control-policy overrides
Tree	overrides
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy override settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum rate override
Context	configure <i>card number fp number ingress network queue-group reference instance-id number</i> policer-control-policy overrides max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p>

Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.

If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds
Tree	priority-mbs-thresholds
Description	<p>Commands in this context configure settings to derive the shared portion and fair portion for each priority level.</p> <p>The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-threshold-separation (*number* | *keyword*)

Synopsis	Minimum separation between any two active thresholds
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (<i>number</i> <i>keyword</i>)
Tree	min-threshold-separation
Description	This command configures the minimum separation between any two active thresholds in the parent policer.

Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority [[level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> policer-control-policy overrides priority-mbs-thresholds priority <i>number</i>
Tree	priority
Description	Commands in this context configure the list of priority MBS threshold priority settings for IOM ingress network forwarding plane queue-group policer control policy overrides.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level] *number*

Synopsis	Priority level, higher number is stricter
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> policer-control-policy overrides priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> policer-control-policy overrides priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution

Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy policy-name reference</i>
Tree	<i>policy-name</i>
Reference	configure <i>qos policer-control-policy named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-overrides

Synopsis	Enter the policer-overrides context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides</i>
Tree	<i>policer-overrides</i>
Description	Commands in this context configure the policer overrides for the IOM ingress network forwarding plane queue-groups.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [*policer-id*] *reference*

Synopsis	Enter the policer list instance
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>

Description	Commands in this context configure the list of policer override parameters for IOM ingress network forwarding plane queue-groups.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *reference*

Synopsis	Policer ID
Context	configure <i>card number</i> <i>fp number</i> <i>ingress network queue-group reference</i> <i>instance-id number</i> <i>policer-overrides policer reference</i>
Tree	<i>policer</i>
Reference	configure <i>qos queue-group-templates ingress queue-group named-item</i> <i>policer number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	configure <i>card number</i> <i>fp number</i> <i>ingress network queue-group reference</i> <i>instance-id number</i> <i>policer-overrides policer reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	<i>cbs</i>
Description	<p>This command configures the CIR leaky bucket exceed threshold of the policer.</p> <p>If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
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Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>network</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-overrides</i> <i>policer</i> <i>reference</i> <i>mbs</i> (<i>number</i> <i>keyword</i>)
Tree	<i>mbs</i>
Description	<p>This command configures the PIR leaky bucket violate threshold of the policer.</p> <p>Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.</p> <p>If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.</p> <p>The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size adjustment
Context	configure <i>card</i> <i>number</i> <i>fp</i> <i>number</i> <i>ingress</i> <i>network</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>policer-overrides</i> <i>policer</i> <i>reference</i> <i>packet-byte-offset</i> <i>number</i>
Tree	<i>packet-byte-offset</i>
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure <i>card number</i> <i>fp number</i> <i>ingress network queue-group reference</i> <i>instance-id number</i> <i>policer-overrides policer reference</i> rate
Tree	rate
Description	<p>Commands in this context configure the metering and optional profiling rates of the policer.</p> <p>The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the policer
Context	configure <i>card number</i> <i>fp number</i> <i>ingress network queue-group reference</i> <i>instance-id number</i> <i>policer-overrides policer reference</i> rate <i>cir (number keyword)</i>
Tree	cir
Description	<p>This command overrides the default CIR rate of the policer.</p> <p>When the policer is first created, the profiling rate defaults to 0 kb/s.</p> <p>When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.</p>
Range	0 to 20000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the policer
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Context	configure <i>card number</i> <i>fp number</i> <i>ingress network queue-group reference</i> <i>instance-id number</i> <i>policer-overrides policer reference</i> <i>rate</i> <i>pir (number keyword)</i>
Tree	<i>pir</i>
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure <i>card number</i> <i>fp number</i> <i>ingress network queue-group reference</i> <i>instance-id number</i> <i>policer-overrides policer reference</i> <i>stat-mode keyword</i>
Tree	<i>stat-mode</i>
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-policy *reference*

Synopsis	Network queue policy
Context	configure <i>card</i> <i>number</i> <i>fp number</i> <i>ingress network queue-policy reference</i>
Tree	<i>queue-policy</i>
Reference	configure <i>qos network-queue</i> <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-extract-prio-mode keyword

Synopsis	Initial drop priority mode of extracted traffic
Context	configure <i>card number fp number</i> init-extract-prio-mode <i>keyword</i>
Tree	init-extract-prio-mode
Description	<p>This command specifies the scheme to select the initial drop priority of extracted control plane traffic.</p> <p>The initial drop priority of extracted packets can be either low or high priority. The drop priority can be altered subsequently by mechanisms such as CPU protection.</p> <p>High priority traffic receives preferential treatment in control plane congestion situations over low priority traffic.</p>
Options	uniform, l3-classify
Default	uniform
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mda [mda-slot] number

Synopsis	Enter the mda list instance
Context	configure <i>card number</i> mda <i>number</i>
Tree	mda
Description	Commands in this context cover attributes for specific MDA and XMA.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mda-slot] number

Synopsis	MDA or XMA slot
Context	configure <i>card number</i> mda <i>number</i>
Tree	mda
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access

Synopsis	Enter the access context
Context	configure <i>card number mda number</i> access
Tree	access
Description	Commands in this context configure egress and ingress pool policy parameters. Access egress and ingress pools are only allocated on channelized MDAs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure <i>card number mda number</i> access egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure <i>card number mda number</i> access ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	configure <i>card number mda number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event [*type*] *keyword*

Synopsis	Enter the event list instance
Context	configure <i>card number mda number event keyword</i>
Tree	<i>event</i>
Description	<p>Commands in this context allow the user to control the action taken when a specific hardware error event is raised against the target MDA. If no event action has been created for a specific event type, the management plane of the router ignores the hardware errors related to that event type.</p> <p>The log event raised for any event type (such as soft-error or memory-error) is tmnx EqHwEventDetected.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[type] *keyword*

Synopsis	MDA event type being monitored
Context	configure <i>card number mda number event keyword</i>
Tree	<i>event</i>
Description	<p>This command configures the type of event to be acted upon.</p> <ul style="list-style-type: none"> • soft-error — Defines the action to take when soft errors are detected on the MDA. • internal-frame-loss — Provides system detected frame loss in the traffic transiting the MDA. • memory-error — Provides the user options to handle MDA memory error events on MDAs. This feature is supported on FP2- and FP3-based Ethernet MDAs and IMM. • data-link-error — Provides the user options to handle datapath link errors on an MDA.
Options	soft-error, internal-frame-loss, memory-error, datapath-link-error
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action when a specific hardware error event is raised
Context	configure <i>card number mda number event keyword action keyword</i>
Tree	<i>action</i>

Description	<p>This command defines the action taken when a specific hardware error event is detected on the target MDA.</p> <p>When no event action is specified for an event type, the hardware errors related to the event type are ignored by the management plane of the router.</p> <p>Actions include the following:</p> <ul style="list-style-type: none"> • <code>log-only</code> — Pass the log event to log management. No other action is taken. • <code>reset-mds</code> — Reset the MDA. • <code>fail-mds</code> — Set the operational state of the MDA to Failed. This Failed state persists until the <code>clear mda</code> command is issued (<code>reset</code>) or the MDA is removed and reinserted (<code>re-seated</code>).
Options	<code>none</code> , <code>log-only</code> , <code>reset</code> , <code>fail</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fail-on-error *boolean*

Synopsis	Set operational state to Failed if an error is detected
Context	configure <i>card number mda number fail-on-error boolean</i>
Tree	<i>fail-on-error</i>
Description	<p>When configured to true, the fail-on-error feature is enabled on the MDA. When a defined rate of egress or ingress XPL errors occur on an MDA within a specified time interval, the MDA is placed in the Failed state. This can force an APS switchover or traffic to be rerouted.</p> <p>The purpose of this feature is to avoid situations where traffic is forced to use a physical link that suffers from errors but is still technically operational. The feature uses values configured in the configure card mda egress-xpl and configure card mda ingress-xpl contexts.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure <i>card number mda number ingress</i>
Tree	<i>ingress</i>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

pre-classifier

Synopsis	Enter the pre-classifier context
Context	configure card <i>number</i> mda <i>number</i> ingress pre-classifier
Tree	pre-classifier
Description	Commands in this context attach an ingress preclassifier policy to the specified MDA.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

dot1p-for-untagged-traffic *number*

Synopsis	Dot1p mapping for untagged traffic
Context	configure card <i>number</i> mda <i>number</i> ingress pre-classifier dot1p-for-untagged-traffic <i>number</i>
Tree	dot1p-for-untagged-traffic
Description	This command specifies the dot1p equivalence for untagged traffic on high-density MDAs.
Range	0 to 7
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Preclassifier policy name
Context	configure card <i>number</i> mda <i>number</i> ingress pre-classifier policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos pre-classifier-policy <i>named-item-64</i>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

mda-type *keyword*



WARNING:

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

Synopsis	MDA type for the slot
Context	configure card <i>number</i> mda <i>number</i> mda-type <i>keyword</i>
Tree	mda-type
Description	<p>This command provisions a specific MDA type to the device configuration for the slot. The MDA can be pre-provisioned and an MDA must be provisioned before connectors or ports can be configured.</p> <p>A maximum of two MDAs can be provisioned on an IOM or XCM. XMAs are provisioned using MDA commands.</p> <p>A medium severity alarm is generated if an MDA is inserted that does not match the MDA type configured for the slot. This alarm is cleared when the correct MDA is inserted or the configuration is modified. A high severity alarm is raised when an administratively enabled MDA is removed from the chassis. This alarm is cleared if either the correct MDA type is inserted or the configuration is modified. A low severity alarm is issued if an MDA is removed that is administratively disabled.</p> <p>An MDA can only be provisioned in a slot if the MDA type is allowed in the MDA slot. An error message is generated when an MDA is provisioned in a slot where it is not allowed.</p> <p>Some MDA hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two MDA types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the MDA occurs when switching between the two provisioned types.</p> <p>An alarm is raised if partial or complete MDA failure is detected. The alarm is cleared when the error condition ceases.</p> <p>New generations of XMAs include variants controlled through hardware and software licensing. For these XMAs, the license level must be provisioned in addition to the MDA type. An XMA cannot become operational unless the provisioned license level matches the license level of the XMA installed into the slot.</p> <p>The set of license levels varies by MDA type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress queues and egress policers. Changes to the provisioned license level may be blocked if configuration that would not be permitted with the new target license level exists. If the license level is not specified, the level is set to the highest license level for that XMA.</p> <p>On the 7705 SAR-1, the MDA in slot 1 is auto-equipped and autoprovisioned by default during startup, and cannot be modified or removed. Slots 3 and 4 are reserved for virtual ISA MDAs.</p> <p>On the 7705 SAR-Hx and 7705 SAR-Mx, Ethernet and T1/E1 MDAs can be provisioned only in slot 1. The MDA in slot 2 is auto-equipped and autoprovisioned by default during startup, and cannot be modified or removed. Slots 3 and 4 are reserved for virtual ISA MDAs.</p> <p>For more information about MDA types, see the "Port types" section in the <i>7705 SAR Gen 2 Interface Configuration Guide</i>.</p>

Options	x12-400g-qsfpdd, x6-200g-cfp2-dco, p10-10g-sfp, p1-100g-cfp, p6-10g-sfp, x40-10g-sfp, m40-10g-sfp, p20-1gb-sfp, s36-100gb-qsfp28-3.6t, p-isa2-ms, p-isa2-ms-e, isa2-aa, isa2-tunnel, isa2-bb, x4-100g-cfp2, maxp1-100gb-cfp, ma4-10gb-sfp+, maxp10-10gb-sfp+, me10-10gb-sfp+, ma2-10gb-sfp+12-1gb-sfp, ma44-1gb-csfp, ma20-1gb-tx, m20-10g-sfp+, me1-100gb-cfp2, m4-100g-cfp4, maxp1-100gb-cfp2, maxp1-100gb-cfp4, isa-ms-v, isa-aa-v, isa-tunnel-v, isa-bb-v, m20-v, me-isa2-ms, me-isa2-ms-e, me40-1gb-csfp, m4-1g-tx+20-1g-sfp+6-10g-sfp+, me6-10gb-sfp+, isa2-video, me2-100gb-qsfp28, i6-10/100eth-tx, i2-sdi, i2-cellular, me12-10/1gb-sfp+, me16-25gb-sfp28+2-100gb-qsfp28, me6-100gb-qsfp28, x6-400g-cfp8, me2-100gb-ms-qsfp28, s18-100gb-qsfp28, x40-10g-sfp-ptp, m40-10g-sfp-ptp, m36-100g-qsfp28, m48-sfp+2-qsfp28, m10-10g-sfp+, m20-1g-csfp, m6-10g-sfp++1-100g-qsfp28, me3-200gb-cfp2-dco, x24-100g-qsfp28, me12-100gb-qsfp28, i1-wlan, s36-400gb-qsfpdd, m24-sfp++8-sfp28+2-qsfp28, s36-100gb-qsfp28, a32-chds1v2, m48-sfp++6-qsfp28, maxp10-10/1gb-msec-sfp+, m4-10g-sfp++1-100g-cfp2, i3-10/100eth-tx, me3-400gb-qsfpdd, m18-25g-sfp28, m14-10g-sfp++4-1g-tx, m6-10g-sfp++4-25g-sfp28, me6-400gb-qsfpdd, me8-10/25gb-sfp28, m10-1g-sfp+2-10g-sfp+, m6-qsfpdd+48-sfp56, m32-qsfp28+4-qsfpdd, m36-qsfpdd, m1-400g-qsfpdd+1-100g-qsfp28, m5-100g-qsfp28, m48-800g-qsfpdd-1x, m24-800g-qsfpdd-1, ms36-800g-qsfpdd, x2-s36-800g-qsfpdd-18.0t, m48-400g-qsfpdd-1, m80-200g-sfpdd+12-800g-qsfpdd-1x, m40-200g-sfpdd+6-800g-qsfpdd-1, m80-200g-sfpdd+12-400g-qsfpdd-1, m46-10g-sfp+, m2-cfp2, m2-qsfpdd+2-qsfp28+24-sfp28, x2-s36-800g-qsfpdd-12.0t, me16-25gb-sfp28+2-100gb-qsfp-b, m10-50g-sfp56, m32-1g-csfp, m80-1g-csfp, m12-sfp28+2-qsfp28, m2-100g-qsfp28+16-10g-sfp+, d24-800g-qsfpdd-1, m10-sfp++6-sfp, m16-sfp112+15-sfp56+6-qsfpdd, m4-qsfp28+16-sfp28+8-sfp56, m8-t1e1-rj48, m4-1g-rj+6-10g-sfp++2-25g-sfp28, m2-1g-sfp+2-10g-sfp+, m8-1g-rj45, m8-1g-sfp, m4-rs232-rj45+4-c3794-sfp, m5e2-100g-qsfp28+2-800g-qdd, m5e8-100g-sfp112+2-800g-qdd, m4-sfp+4-sfp+, m4-sfp+4-sfp+-s, m16-sfp++4-sfp28, m5e10-100g-qsfp28, isa-dms-v, m5e16-100g-sfp112, m8-sfp112+18-sfp28+2-qsfpdd, m8-c3794-sfp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure <i>card number</i> <i>mda number</i> network
Tree	network
Description	Commands in this context configure egress and ingress pool policy parameters for the network. Network egress pools are only allocated on channelized MDAs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure <i>card number</i> <i>mda number</i> <i>network</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure <i>card number</i> <i>mda number</i> <i>network</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-e keyword

Synopsis	Synchronous Ethernet capability
Context	configure <i>card number</i> <i>mda number</i> sync-e <i>keyword</i>
Tree	sync-e
Description	This command enables synchronous Ethernet on the MDA. When enabled, any port on the MDA can be used as a source port in the central frequency clock configuration, under the configure system central-frequency-clock context.
Options	true, false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timestamp-freq number

Synopsis	DCR clocking mode timestamp frequency used on the MDA
Context	configure <i>card number</i> <i>mda number</i> timestamp-freq <i>number</i>
Tree	timestamp-freq
Range	19440 77760
Units	kilohertz
Introduced	26.10.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

4.5 chassis commands

```
configure
- chassis keyword chassis-number number
- apply-groups reference
- apply-groups-exclude reference
- fan number
- apply-groups reference
- apply-groups-exclude reference
- fan-module-type keyword
- power-supply number
- apply-groups reference
- apply-groups-exclude reference
```

4.5.1 chassis command descriptions

chassis [**chassis-class**] *keyword chassis-number number*

Synopsis	Enter the chassis list instance
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[chassis-class] *keyword*

Synopsis	Functional use of the physical chassis
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Options	router, ethernet-satellite
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chassis-number *number*

Synopsis	Unique index to identify this physical chassis
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Range	1 to 100
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fan [**fan-slot**] *number*

Synopsis	Enter the fan list instance
Context	configure chassis <i>keyword chassis-number number fan number</i>

Tree	fan
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[fan-slot] number

Synopsis	Chassis fan slot number
Context	configure chassis keyword chassis-number number fan number
Tree	fan
Range	1 to 31
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

fan-module-type keyword

Synopsis	Type of fan tray module
Context	configure chassis keyword chassis-number number fan number fan-module-type keyword
Tree	fan-module-type
Options	fan-sar-10x-f, fan-sar-10x-r
Introduced	26.10.R1
Platforms	7705 SAR-10x

power-supply [power-supply-id] number

Synopsis	Enter the power-supply list instance
Context	configure chassis keyword chassis-number number power-supply number
Tree	power-supply
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[power-supply-id] number

Synopsis	Unique identifier index for a power supply tray in the chassis
----------	--

Context	configure chassis <i>keyword chassis-number number power-supply number</i>
Tree	power-supply
Range	1 to 31
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.6 connection-profile commands

```
configure
- connection-profile
-   apply-groups reference
-   apply-groups-exclude reference
-   vlan number
-   apply-groups reference
-   apply-groups-exclude reference
-   description description
-   qtag-range number
-   apply-groups reference
-   apply-groups-exclude reference
-   end number
```

4.6.1 connection-profile command descriptions

connection-profile

Synopsis	Enter the connection-profile context
Context	configure connection-profile
Tree	connection-profile
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan [[connection-profile-id](#)] *number*

Synopsis	Enter the vlan list instance
Context	configure connection-profile vlan <i>number</i>
Tree	vlan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[connection-profile-id](#)] *number*

Synopsis	Identifier of this connection profile
Context	configure connection-profile vlan <i>number</i>
Tree	vlan
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure connection-profile vlan <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

qtag-range [*start*] *number*

Synopsis Enter the **qtag-range** list instance
Context **configure** *connection-profile* *vlan* *number* **qtag-range** *number*
Tree **qtag-range**
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[start] *number*

Synopsis Lower bound of VLAN range for connection profile
Context **configure** *connection-profile* *vlan* *number* **qtag-range** *number*
Tree **qtag-range**
Range 1 to 4094
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

end *number*



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

Synopsis Upper bound of VLAN range for connection profile
Context **configure** *connection-profile* *vlan* *number* **qtag-range** *number* **end** *number*
Tree **end**
Range 1 to 4094
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

4.7 debug commands

```

debug
- certificate
- auto-certificate-update pki-file-name
- auto-crl-update named-item
- cmpv2 named-item
- est named-item
- ocsp named-item
- ipsec
- certificate pki-file-name
- client-db named-item
- gateway named-item
- idi display-string
- detail boolean
- display-keys boolean
- suppress-dpd-debug boolean
- tunnel (ipv4-address-no-zone | ipv6-address-no-zone) port number
- detail boolean
- display-keys boolean
- suppress-dpd-debug boolean
- tunnel-nat ipv4-unicast-address port number pre-nat-ip-address ipv4-unicast-
address pre-nat-port number
- detail boolean
- display-keys boolean
- suppress-dpd-debug boolean
- tunnel-subnet (ipv4-prefix | ipv6-prefix) port (keyword | number)
- detail boolean
- display-keys boolean
- suppress-dpd-debug boolean
- transport-mode
- ip-tunnel interface-name
- detail boolean
- display-keys boolean
- suppress-dpd-debug boolean
- tunnel named-item
- detail boolean
- display-keys boolean
- suppress-dpd-debug boolean
- lag lag-interface
- adaptive-loadbalancing boolean
- bfd boolean
- config boolean
- iom-updates boolean
- lacp-packets boolean
- multi-chassis boolean
- multi-chassis-packets boolean
- port port
- bfd boolean
- config boolean
- lacp-packets boolean
- multi-chassis boolean
- port-states boolean
- redundancy boolean
- selection-logic boolean
- state-machine boolean
- timers boolean
- port-states boolean
- redundancy boolean
- selection-logic boolean
- state-machine boolean

```

debug lag timers

```

- timers boolean
- multicast-management
- multicast-reporting-destination named-item
  - detail-level keyword
  - egress boolean
  - group-address ipv4-multicast-address
  - host-address ipv4-unicast-address
- python
  - python-script named-item
    - script-all-info
    - script-compile-error
    - script-export-variables
    - script-output
    - script-output-on-error
    - script-runtime-error
- router string
  - dhcp
    - all-packets
      - detail-level keyword
      - mode keyword
    - interface interface-name
      - detail-level keyword
      - mode keyword
    - mac mac-unicast-address-no-zero
      - detail-level keyword
      - mode keyword
    - sap sap
      - detail-level keyword
      - mode keyword
  - dhcp-server
    - dhcpv4 named-item
      - all-packets
        - detail-level keyword
        - mode keyword
      - lease ipv4-prefix
        - detail-level keyword
        - mode keyword
      - mac mac-address
        - detail-level keyword
        - mode keyword
    - dhcpv6 named-item
      - all-packets
        - detail-level keyword
        - mode keyword
      - lease ipv6-prefix
        - detail-level keyword
        - mode keyword
      - link-local-address ipv6-address
        - detail-level keyword
        - mode keyword
  - dhcp6
    - all-packets
      - detail-level keyword
      - mode keyword
    - client-identifier
      - duid hex-string
        - detail-level keyword
        - mask hex-string
        - mode keyword
      - link-layer-address hex-string
        - detail-level keyword
        - mode keyword
    - interface interface-name
      - detail-level keyword

```

debug router dhcp6 interface mode

```

- mode keyword
- sap sap
  - detail-level keyword
  - mode keyword
- igmp
  - group-interface
  - all-group-interfaces
  - host
  - ip-address ipv4-address
  - interface
  - all-interfaces
  - interface-name interface-name
- mcs
  - all-interfaces
  - interface-name interface-name
- miscellaneous boolean
- packet
  - all-origins
  - dropped boolean
  - egress boolean
  - host-ip-address ipv4-address
  - ingress boolean
  - interface-ip-address ipv4-address
  - interface-name interface-name
  - type keyword
- ip
  - icmp
  - all-packets
  - interface interface-name
  - icmp6
  - all-packets
  - interface interface-name
  - interface-events
  - all-events
  - interface interface-name
  - neighbor
  - all-events
  - address-family keyword
  - interface interface-name
  - address-family keyword
  - packet
  - all-packets
  - address-family keyword
  - headers boolean
  - protocol-id number
  - interface interface-name
  - address-family keyword
  - headers boolean
  - protocol-id number
  - route-table
  - all
  - filter
  - ipv4
  - prefix ipv4-prefix
  - longest-prefix-match boolean
  - ipv6
  - prefix ipv6-prefix
  - longest-prefix-match boolean
  - tunnel-table
  - all
  - filter
  - id
  - sdp-id number
  - tunnel-id number

```


debug router ip tunnel-table filter ipv4

```

- ipv4
  - prefix ipv4-prefix
  - longest-prefix-match boolean
  - tunnel-type (keyword | keyword)
- ipv6
  - prefix ipv6-prefix
  - longest-prefix-match boolean
  - tunnel-type (keyword | keyword)
- ldp
  - interface interface-name
  - ipv4
    - event
    - messages
    - packet
    - hello
    - detail boolean
  - ipv6
    - event
    - messages
    - packet
    - hello
    - detail boolean
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - event
    - bindings
    - messages
    - packet
    - hello
    - detail boolean
    - init
    - detail boolean
    - keepalive
    - label
    - detail boolean
- mld
  - group-interface
  - all-group-interfaces
  - host
  - ip-address ipv6-address
  - interface
  - all-interfaces
  - interface-name interface-name
  - mcs
  - all-interfaces
  - interface-name interface-name
  - miscellaneous boolean
  - packet
  - all-origins
  - dropped boolean
  - egress boolean
  - host-ip-address ipv6-address
  - ingress boolean
  - interface-ip-address ipv6-address
  - interface-name interface-name
  - type keyword
- msdp
  - packet
  - all-packet-types
  - packet-types
  - keep-alive
  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sa-request
  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sa-response

```

debug router msdp packet packet-types sa-response peer-address

```

    - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - source-active
    - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pim
  - group-address ipv4-multicast-address
- rtm
  - rp-address ipv4-address
- sa-db
  - group-address ipv4-multicast-address
  - rp-address ipv4-address
  - source-address ipv4-address
- mtrace
  - miscellaneous
- packet
  - all-packet-types
  - packet-types
    - query boolean
    - request boolean
    - response boolean
- mtrace2
  - miscellaneous
- packet
  - all-packet-types
  - packet-types
    - query boolean
    - request boolean
    - response boolean
- ospf number
  - area
    - all
    - area-id ipv4-address
  - area-range
    - all
    - range-address ipv4-address
  - cspf
    - all
    - cspf-addr ipv4-address
  - graceful-restart boolean
  - interface
    - interface-ip-address ipv4-address
    - interface-name string
  - leak
    - all
    - dest-addr ipv4-address
  - lsdb
    - adv-rtr-id ipv4-address
    - area ipv4-address
    - ls-id ipv4-address
    - ls-type keyword
  - misc boolean
  - neighbor
    - interface-ip-address ipv4-address
    - interface-name string
  - nssa-range
    - all
    - range-address ipv4-address
  - packet
    - detail boolean
    - direction keyword
    - interface-name string
    - packet-type keyword
  - rsvp-shortcut
    - all
    - rsvp-ep ipv4-address

```

debug router ospf rtm

```

- rtm
  - all
  - dest-addr ipv4-address
- sham-neighbor
  - all
  - dest-addr ipv4-address
- spf
  - all
  - destination-address ipv4-address
  - type keyword
- tunnel-endpoint
  - leak
    - all
    - tunnel-endpoint ipv4-address
  - spf
    - all
    - spf-endpoint ipv4-address
- virtual-neighbor
  - all
  - neighbor-id ipv4-address
- ospf3 number
  - area
    - all
    - area-id ipv4-address
  - area-range
    - all
    - range-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - graceful-restart boolean
  - interface
    - all
    - interface-name string
  - leak
    - all
    - dest-addr (ipv4-address-no-zone | ipv6-address-no-zone)
  - lsdb
    - adv-rtr-id ipv4-address
    - area ipv4-address
    - ls-id ipv4-address
    - ls-type keyword
  - misc boolean
  - neighbor
    - interface-name string
    - router-id ipv4-address
  - nssa-range
    - all
    - range-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - packet
    - detail boolean
    - direction keyword
    - interface-name string
    - packet-type keyword
- rtm
  - all
  - dest-addr (ipv4-address-no-zone | ipv6-address-no-zone)
- spf
  - all
  - destination-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - type keyword
- tunnel-endpoint
  - leak
    - all
    - tunnel-endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
  - spf
    - all

```

debug router ospf3 tunnel-endpoint spf spf-endpoint

```

- spf-endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- virtual-neighbor
- all
- neighbor-id ipv4-address
- pim
- events
- adjacency
- all
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- assert
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- auto-rp
- bgp
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- bier-inband
- detail boolean
- bsr
- detail boolean
- data
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- db
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- dynml dp
- detail boolean
- extranet
- detail boolean
- graft
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- interface
- interface-name interface-name
- jp
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- mofrr
- mrib
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- msg
- mvpn-rtcache
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- red
- detail boolean
- register
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- rpfv
- detail boolean
- rtm

```

debug router pim events rtm detail

- **detail** *boolean*
- **s-pmsi**
 - **detail** *boolean*
 - **vpn-source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **tunnel-interface**
 - **ldp-p2mp-id** *number*
 - **sender-address** *ipv4-unicast-address*
- **packet**
 - **all-origins**
 - **all-packet-types**
 - **egress** *boolean*
 - **ingress** *boolean*
 - **interface-name** *interface-name*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **packet-types**
 - **assert**
 - **all-origins**
 - **interface-name** *interface-name*
 - **auto-rp-announcement**
 - **all-origins**
 - **interface-name** *interface-name*
 - **auto-rp-mapping**
 - **all-origins**
 - **interface-name** *interface-name*
 - **bsr**
 - **all-origins**
 - **interface-name** *interface-name*
 - **crp**
 - **all-origins**
 - **interface-name** *interface-name*
 - **graft**
 - **all-origins**
 - **interface-name** *interface-name*
 - **graft-ack**
 - **all-origins**
 - **interface-name** *interface-name*
 - **hello**
 - **all-origins**
 - **interface-name** *interface-name*
 - **jp**
 - **all-origins**
 - **interface-name** *interface-name*
 - **mdt-tlv**
 - **all-origins**
 - **interface-name** *interface-name*
 - **register**
 - **all-origins**
 - **interface-name** *interface-name*
 - **register-stop**
 - **all-origins**
 - **interface-name** *interface-name*
- **radius**
- **servers**
 - **attribute** *string*
 - **extended-type** *number*
 - **transaction** *boolean*
 - **type** *number*
 - **value**
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **hex** *hex-string*
 - **integer** *number*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **string** *string*

debug router radius servers attribute vendor-specific

```

- vendor-specific
  - encoding
    - length-size number
    - type-size number
  - vendor (number | keyword)
  - vendor-type number
- detail-level keyword
- packet-types
  - accounting boolean
  - authentication boolean
  - coa boolean
  - server-address (ipv4-address-no-zone | ipv6-address-no-zone)
- vrrp
  - events
    - all-events
    - interface interface-name
    - all-vrids
    - ipv4
      - vrid number
    - ipv6
      - vrid number
  - packet
    - all-packets
    - interface interface-name
    - all-vrids
    - ipv4
      - vrid number
    - ipv6
      - vrid number
- service
  - vpls service-name
  - igmp-snooping
    - packet
      - detail keyword
      - dropped boolean
      - egress boolean
      - evpn-mpls boolean
      - ingress boolean
      - mac mac-address
      - sap sap
      - sdp-bind sdp-bind-id
  - mld-snooping
    - packet
      - detail keyword
      - dropped boolean
      - egress boolean
      - evpn-mpls boolean
      - ingress boolean
      - mac mac-address
      - sap sap
      - sdp-bind sdp-bind-id
  - pim-snooping
    - events
      - adjacency
      - all
        - detail boolean
        - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - db
        - detail boolean
        - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - jp
        - detail boolean

```

debug service vpls pim-snooping events jp group-address

```

    - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - mcs
    - detail boolean
  - port
    - detail boolean
    - evpn-mpls
    - sap-id sap
    - sdp-bind-id sdp-bind-id
  - red
    - detail boolean
  - packet
    - all-origins
    - all-packet-types
    - packet-types
    - hello boolean
    - jp boolean
    - port
      - evpn-mpls
      - sap-id sap
      - sdp-bind-id sdp-bind-id
  - proxy-arp
    - all
    - ip
      - address ipv4-unicast-address
    - mac
      - address mac-address
  - proxy-nd
    - all
    - ip
      - address ipv6-address
    - mac
      - address mac-address
  - stp
    - events
      - all-events
      - event-types
        - bpdu boolean
        - core-connectivity boolean
        - exception boolean
        - fsm-state-changes boolean
        - fsm-timers boolean
        - port-role boolean
        - port-state boolean
      - sap sap
      - sdp-bind sdp-bind-id
  - subscriber-mgmt
    - local-user-db named-item
    - mode keyword
  - system
    - grpc
      - client
        - all
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - type keyword
    - grpc-tunnel
      - tunnel
        - all
        - name named-item
  - management-interface
    - netconf keyword
    - snmp keyword
  - persistence
    - all

```

debug system persistence ancp

- **ancp**
- **dhcp-server**
- **nat-fwds**

4.7.1 debug command descriptions

debug

Synopsis	Configure application or protocol tracing
Context	debug
Tree	debug
Description	Commands in this context enable detailed debugging information for various protocols and router functions.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate

Synopsis	Enter the certificate context
Context	debug certificate
Tree	certificate
Description	Commands in this context configure debugging for certificates.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-certificate-update [[filename](#)] *pki-file-name*

Synopsis	Add a list entry for auto-certificate-update
Context	debug certificate auto-certificate-update <i>pki-file-name</i>
Tree	auto-certificate-update
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[filename\]](#) *pki-file-name*

Synopsis	Certificate filename
Context	debug certificate auto-certificate-update <i>pki-file-name</i>

Tree	auto-certificate-update
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-crl-update [[ca-profile-name](#)] *named-item*

Synopsis	Add a list entry for auto-crl-update
Context	debug certificate auto-crl-update <i>named-item</i>
Tree	auto-crl-update
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-profile-name] *named-item*

Synopsis	Certificate Authority (CA) profile name
Context	debug certificate auto-crl-update <i>named-item</i>
Tree	auto-crl-update
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cmpv2 [[ca-profile-name](#)] *named-item*

Synopsis	Add a list entry for cmpv2
Context	debug certificate cmpv2 <i>named-item</i>
Tree	cmpv2
Description	This command adds a list entry for a CA profile to debug Certificate Management Protocol version 2 (CMPv2).

Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-profile-name] *named-item*

Synopsis	CA profile name
Context	debug certificate cmpv2 <i>named-item</i>
Tree	cmpv2
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est [[est-profile-name](#)] *named-item*

Synopsis	Add a list entry for est
Context	debug certificate est <i>named-item</i>
Tree	est
Description	This command adds a list entry for debugging Enrollment over Secure Transport Protocol (EST).
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[est-profile-name](#)] *named-item*

Synopsis	EST profile name
Context	debug certificate est <i>named-item</i>
Tree	est
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ocsp [[ca-profile-name](#)] *named-item*

Synopsis	Add a list entry for ocsp
Context	debug certificate ocsp <i>named-item</i>
Tree	ocsp
Description	This command adds a list entry for a CA profile to debug the Online Certificate Status Protocol (OCSP).
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-profile-name] *named-item*

Synopsis	CA profile name
Context	debug certificate ocsp <i>named-item</i>
Tree	ocsp
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec

Synopsis	Enter the ipsec context
Context	debug ipsec
Tree	ipsec
Description	Commands in this context configure debugging for IP security (IPsec) functionality.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

certificate [[filename](#)] *pki-file-name*

Synopsis	Add a list entry for certificate
Context	debug ipsec certificate <i>pki-file-name</i>
Tree	certificate
Description	This command adds a list entry for debugging certificate chain computation in the certificate profile.
Max. instances	200
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[filename] *pki-file-name*

Synopsis	Imported IPsec certificate filename
Context	debug ipsec certificate <i>pki-file-name</i>
Tree	certificate
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client-db [[name](#)] *named-item*

Synopsis	Add a list entry for client-db
Context	debug ipsec client-db <i>named-item</i>
Tree	client-db
Description	This command adds a list entry for debugging the specified IPsec client database.
Max. instances	1000
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec client database name
Context	debug ipsec client-db <i>named-item</i>
Tree	client-db
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gateway [\[name\]](#) *named-item*

Synopsis	Enter the gateway list instance
Context	debug ipsec gateway <i>named-item</i>
Tree	gateway
Description	<p>Commands in this context configure debugging for dynamic IPsec tunnels that terminate on the specified IPsec gateway.</p> <p>Specify the tunnel to debug using either its source address or source subnet, by using the debug ipsec gateway tunnel command. If a subnet is specified, the system enables debugging for all tunnels with source addresses in the specified subnet.</p>
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec gateway name
Context	debug ipsec gateway <i>named-item</i>
Tree	gateway
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

idi [*idi-regex*] *display-string*

Synopsis	Enter the idi list instance
Context	debug ipsec gateway <i>named-item</i> idi <i>display-string</i>
Tree	idi
Description	Commands in this context configure debugging for the specified IDi.
Max. instances	1
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[idi-regex] *display-string*

Synopsis	Regular expression pattern used to match the peer IDi
Context	debug ipsec gateway <i>named-item</i> idi <i>display-string</i>
Tree	idi
String length	1 to 255
Notes	This element is part of a list key.
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

detail *boolean*

Synopsis	Display detailed debug information
Context	debug ipsec gateway <i>named-item</i> idi <i>display-string</i> detail <i>boolean</i>
Tree	detail
Default	false
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

display-keys *boolean*

Synopsis	Display keys in the debug output
Context	debug ipsec gateway <i>named-item</i> idi <i>display-string</i> display-keys <i>boolean</i>
Tree	display-keys

Default	false
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-dpd-debug *boolean*

Synopsis	Display debug output without DPD information
Context	debug ipsec gateway <i>named-item</i> idi <i>display-string</i> suppress-dpd-debug <i>boolean</i>
Tree	suppress-dpd-debug
Default	false
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Enter the tunnel list instance
Context	debug ipsec gateway <i>named-item</i> tunnel (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	tunnel
Description	Commands in this context configure debugging for the specified IPsec gateway tunnel.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Gateway tunnel remote IP address
Context	debug ipsec gateway <i>named-item</i> tunnel (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	tunnel
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port number

Synopsis	Gateway tunnel remote port
Context	debug ipsec gateway <i>named-item</i> tunnel (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	tunnel
Range	1 to 65535
MD-CLI default	500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

detail boolean

Synopsis	Display detailed debug information
Context	debug ipsec gateway <i>named-item</i> tunnel (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

display-keys boolean

Synopsis	Display keys in the debug output
Context	debug ipsec gateway <i>named-item</i> tunnel (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number display-keys <i>boolean</i>
Tree	display-keys
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-dpd-debug boolean

Synopsis	Display debug output without DPD information
----------	--

Context	<code>debug ipsec gateway</code> <i>named-item</i> <code>tunnel</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) <code>port number</code> <code>suppress-dpd-debug</code> <i>boolean</i>
Tree	<code>suppress-dpd-debug</code>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-nat [`ip-address`] *ipv4-unicast-address* `port number` *pre-nat-ip-address* *ipv4-unicast-address* `pre-nat-port number`

Synopsis	Enter the tunnel-nat list instance
Context	<code>debug ipsec gateway</code> <i>named-item</i> <code>tunnel-nat</code> <i>ipv4-unicast-address</i> <code>port number</code> <i>pre-nat-ip-address</i> <i>ipv4-unicast-address</i> <code>pre-nat-port number</code>
Tree	<code>tunnel-nat</code>
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ip-address] *ipv4-unicast-address*

Synopsis	Gateway tunnel remote IP address
Context	<code>debug ipsec gateway</code> <i>named-item</i> <code>tunnel-nat</code> <i>ipv4-unicast-address</i> <code>port number</code> <i>pre-nat-ip-address</i> <i>ipv4-unicast-address</i> <code>pre-nat-port number</code>
Tree	<code>tunnel-nat</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port number

Synopsis	Gateway tunnel remote port
Context	<code>debug ipsec gateway</code> <i>named-item</i> <code>tunnel-nat</code> <i>ipv4-unicast-address</i> <code>port number</code> <i>pre-nat-ip-address</i> <i>ipv4-unicast-address</i> <code>pre-nat-port number</code>
Tree	<code>tunnel-nat</code>

Range	1 to 65535
MD-CLI default	500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-nat-ip-address *ipv4-unicast-address*

Synopsis	Gateway tunnel peer pre-NAT IP address
Context	debug ipsec gateway <i>named-item</i> tunnel-nat <i>ipv4-unicast-address</i> port <i>number</i> pre-nat-ip-address <i>ipv4-unicast-address</i> pre-nat-port <i>number</i>
Tree	tunnel-nat
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-nat-port *number*

Synopsis	Gateway tunnel peer pre-NAT port
Context	debug ipsec gateway <i>named-item</i> tunnel-nat <i>ipv4-unicast-address</i> port <i>number</i> pre-nat-ip-address <i>ipv4-unicast-address</i> pre-nat-port <i>number</i>
Tree	tunnel-nat
Range	1 to 65535
MD-CLI default	500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

detail *boolean*

Synopsis	Display detailed debug information
Context	debug ipsec gateway <i>named-item</i> tunnel-nat <i>ipv4-unicast-address</i> port <i>number</i> pre-nat-ip-address <i>ipv4-unicast-address</i> pre-nat-port <i>number</i> detail <i>boolean</i>

Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

display-keys *boolean*

Synopsis	Display keys in the debug output
Context	debug ipsec gateway named-item tunnel-nat ipv4-unicast-address port number pre-nat-ip-address ipv4-unicast-address pre-nat-port number display-keys <i>boolean</i>
Tree	display-keys
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-dpd-debug *boolean*

Synopsis	Display debug output without DPD information
Context	debug ipsec gateway named-item tunnel-nat ipv4-unicast-address port number pre-nat-ip-address ipv4-unicast-address pre-nat-port number suppress-dpd-debug <i>boolean</i>
Tree	suppress-dpd-debug
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-subnet [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [port](#) (*keyword* | *number*)

Synopsis	Enter the tunnel-subnet list instance
Context	debug ipsec gateway named-item tunnel-subnet (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) port (<i>keyword</i> <i>number</i>)
Tree	tunnel-subnet
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Gateway tunnel remote IP prefix
Context	debug ipsec gateway <i>named-item</i> tunnel-subnet (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) port (<i>keyword</i> <i>number</i>)
Tree	tunnel-subnet
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port (*keyword* | *number*)

Synopsis	Gateway tunnel remote port
Context	debug ipsec gateway <i>named-item</i> tunnel-subnet (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) port (<i>keyword</i> <i>number</i>)
Tree	tunnel-subnet
Range	1 to 65535
Options	any
MD-CLI default	any
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

detail *boolean*

Synopsis	Display detailed debug information
Context	debug ipsec gateway <i>named-item</i> tunnel-subnet (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) port (<i>keyword</i> <i>number</i>) detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

display-keys *boolean*

Synopsis	Display keys in the debug output
Context	debug ipsec gateway <i>named-item</i> tunnel-subnet (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) port (<i>keyword</i> <i>number</i>) display-keys <i>boolean</i>
Tree	display-keys
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-dpd-debug *boolean*

Synopsis	Display debug output without DPD information
Context	debug ipsec gateway <i>named-item</i> tunnel-subnet (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) port (<i>keyword</i> <i>number</i>) suppress-dpd-debug <i>boolean</i>
Tree	suppress-dpd-debug
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

transport-mode

Synopsis	Enter the transport-mode context
Context	debug ipsec transport-mode
Tree	transport-mode
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-tunnel [[name](#)] *interface-name*

Synopsis	Enter the ip-tunnel list instance
Context	debug ipsec transport-mode ip-tunnel <i>interface-name</i>
Tree	ip-tunnel
Max. instances	16
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *interface-name*

Synopsis IPsec transport mode IP tunnel name

Context [debug ipsec transport-mode ip-tunnel](#) *interface-name*

Tree [ip-tunnel](#)

String length 1 to 32

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

detail *boolean*

Synopsis Display detailed debug information

Context [debug ipsec transport-mode ip-tunnel](#) *interface-name* [detail](#) *boolean*

Tree [detail](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

display-keys *boolean*

Synopsis Display keys in the debug output

Context [debug ipsec transport-mode ip-tunnel](#) *interface-name* [display-keys](#) *boolean*

Tree [display-keys](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-dpd-debug *boolean*

Synopsis Display debug output without DPD information

Context [debug ipsec transport-mode ip-tunnel](#) *interface-name* [suppress-dpd-debug](#) *boolean*

Tree [suppress-dpd-debug](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel [[name](#)] *named-item*

Synopsis	Enter the tunnel list instance
Context	debug ipsec tunnel <i>named-item</i>
Tree	tunnel
Description	Commands in this context configure debugging for the specified IPsec tunnel.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec tunnel name
Context	debug ipsec tunnel <i>named-item</i>
Tree	tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

detail *boolean*

Synopsis	Display detailed debug information
Context	debug ipsec tunnel <i>named-item</i> detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

display-keys *boolean*

Synopsis	Display keys in the debug output
Context	debug ipsec tunnel <i>named-item</i> display-keys <i>boolean</i>
Tree	display-keys
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-dpd-debug *boolean*

Synopsis	Display debug output without DPD information
Context	debug ipsec tunnel <i>named-item</i> suppress-dpd-debug <i>boolean</i>
Tree	suppress-dpd-debug
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lag [[lag-name](#)] *lag-interface*

Synopsis	Enter the lag list instance
Context	debug lag <i>lag-interface</i>
Tree	lag
Description	Commands in this context configure debugging for Link Aggregation Group (LAG).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] *lag-interface*

Synopsis	LAG name
Context	debug lag <i>lag-interface</i>
Tree	lag
Description	<p>This command specifies the LAG name.</p> <p>In model-driven interfaces, the LAG name is used for configuration references and show commands. A service provider or administrator can use the defined LAG name to identify and manage LAGs within the SR OS platforms.</p>

	The LAG name must always start with "lag-".
String length	1 to 27
String format	'lag-interface' must be lag- followed by number 1-800 or up to 23 chars (e.g. lag-1 or lag-my-lag)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptive-loadbalancing *boolean*

Synopsis	Enable debugging for adaptive load balancing
Context	debug lag lag-interface adaptive-loadbalancing <i>boolean</i>
Tree	adaptive-loadbalancing
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

bfd *boolean*

Synopsis	Enable debugging for BFD
Context	debug lag lag-interface bfd <i>boolean</i>
Tree	bfd
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

config *boolean*

Synopsis	Enable debugging for configuration changes
Context	debug lag lag-interface config <i>boolean</i>
Tree	config
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

iom-updates *boolean*

Synopsis	Enable debugging for IOM updates
Context	debug lag <i>lag-interface</i> iom-updates <i>boolean</i>
Tree	iom-updates
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP-packets *boolean*

Synopsis	Enable debugging for LACP packets
Context	debug lag <i>lag-interface</i> lACP-packets <i>boolean</i>
Tree	lACP-packets
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-chassis *boolean*

Synopsis	Enable debugging for multi-chassis LAG
Context	debug lag <i>lag-interface</i> multi-chassis <i>boolean</i>
Tree	multi-chassis
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-chassis-packets *boolean*

Synopsis	Enable debugging for multi-chassis packets
Context	debug lag <i>lag-interface</i> multi-chassis-packets <i>boolean</i>
Tree	multi-chassis-packets
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

port [port-id] *port*

Synopsis Enter the **port** list instance

Context [debug lag lag-interface port port](#)

Tree [port](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[port-id] port

Synopsis Unique identifier for the port in the LAG

Context [debug lag lag-interface port port](#)

Tree [port](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bfd *boolean*

Synopsis Enable debugging for BFD

Context [debug lag lag-interface port port bfd boolean](#)

Tree [bfd](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

config *boolean*

Synopsis Enable debugging for configuration changes

Context [debug lag lag-interface port port config boolean](#)

Tree [config](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lACP-packets *boolean*

Synopsis Enable debugging for LACP packets
Context [debug lag lag-interface](#) [port](#) [port](#) [lACP-packets](#) *boolean*
Tree [lACP-packets](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

multi-chassis *boolean*

Synopsis Enable debugging for multi-chassis LAG
Context [debug lag lag-interface](#) [port](#) [port](#) [multi-chassis](#) *boolean*
Tree [multi-chassis](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-states *boolean*

Synopsis Enable debugging for port-state changes
Context [debug lag lag-interface](#) [port](#) [port](#) [port-states](#) *boolean*
Tree [port-states](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

redundancy *boolean*

Synopsis Enable debugging for redundancy
Context [debug lag lag-interface](#) [port](#) [port](#) [redundancy](#) *boolean*
Tree [redundancy](#)
Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

selection-logic *boolean*

Synopsis Enable debugging for selection logic
Context [debug lag lag-interface](#) [port port](#) [selection-logic](#) *boolean*
Tree [selection-logic](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

state-machine *boolean*

Synopsis Enable debugging for state-machine changes
Context [debug lag lag-interface](#) [port port](#) [state-machine](#) *boolean*
Tree [state-machine](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timers *boolean*

Synopsis Enable debugging for timers
Context [debug lag lag-interface](#) [port port](#) [timers](#) *boolean*
Tree [timers](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-states *boolean*

Synopsis Enable debugging for port-state changes
Context [debug lag lag-interface](#) [port-states](#) *boolean*
Tree [port-states](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redundancy *boolean*

Synopsis	Enable debugging for redundancy
Context	debug lag <i>lag-interface</i> redundancy <i>boolean</i>
Tree	redundancy
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
Context	debug lag <i>lag-interface</i> selection-logic <i>boolean</i>
Tree	selection-logic
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag <i>lag-interface</i> state-machine <i>boolean</i>
Tree	state-machine
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers *boolean*

Synopsis	Enable debugging for timers
Context	debug lag <i>lag-interface</i> timers <i>boolean</i>

Tree	timers
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-management

Synopsis	Enter the multicast-management context
Context	debug multicast-management
Tree	multicast-management
Description	Commands in this context debug multicast path management.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-reporting-destination [[name](#)] *named-item*

Synopsis	Enter the multicast-reporting-destination list instance
Context	debug multicast-management multicast-reporting-destination <i>named-item</i>
Tree	multicast-reporting-destination
Description	Commands in this context debug multicast path management reporting destinations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Multicast reporting destination name
Context	debug multicast-management multicast-reporting-destination <i>named-item</i>
Tree	multicast-reporting-destination
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the debug output
Context	debug multicast-management multicast-reporting-destination <i>named-item</i> detail-level keyword
Tree	detail-level
Options	low, medium, high
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress *boolean*

Synopsis	Enable tracing for outgoing messages
Context	debug multicast-management multicast-reporting-destination <i>named-item</i> egress boolean
Tree	egress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address *ipv4-multicast-address*

Synopsis	Group address
Context	debug multicast-management multicast-reporting-destination <i>named-item</i> group-address ipv4-multicast-address
Tree	group-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-address *ipv4-unicast-address*

Synopsis	Host address
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Context	debug multicast-management multicast-reporting-destination <i>named-item</i> host-address ipv4-unicast-address
Tree	host-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python

Synopsis	Enter the python context
Context	debug python
Tree	python
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

python-script [[name](#)] *named-item*

Synopsis	Enter the python-script list instance
Context	debug python python-script <i>named-item</i>
Tree	python-script
Max. instances	8
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[[name](#)] *named-item*

Synopsis	Python script name
Context	debug python python-script <i>named-item</i>
Tree	python-script
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-all-info

Synopsis	All script information
Context	debug python python-script <i>named-item</i> script-all-info
Tree	script-all-info
Notes	The following elements are part of a choice: script-all-info or (script-compile-error , script-export-variables , script-output , script-output-on-error , and script-runtime-error).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-compile-error

Synopsis	Log information on compile errors
Context	debug python python-script <i>named-item</i> script-compile-error
Tree	script-compile-error
Notes	The following elements are part of a choice: script-all-info or (script-compile-error , script-export-variables , script-output , script-output-on-error , and script-runtime-error).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-export-variables

Synopsis	Export variables on successful script completion
Context	debug python python-script <i>named-item</i> script-export-variables
Tree	script-export-variables
Notes	The following elements are part of a choice: script-all-info or (script-compile-error , script-export-variables , script-output , script-output-on-error , and script-runtime-error).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-output

Synopsis	Log information with script output data
Context	debug python python-script <i>named-item</i> script-output

Tree	script-output
Notes	The following elements are part of a choice: script-all-info or (script-compile-error , script-export-variables , script-output , script-output-on-error , and script-runtime-error).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-output-on-error

Synopsis	Log information with unsuccessful script output data
Context	debug python python-script <i>named-item</i> script-output-on-error
Tree	script-output-on-error
Notes	The following elements are part of a choice: script-all-info or (script-compile-error , script-export-variables , script-output , script-output-on-error , and script-runtime-error).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

script-runtime-error

Synopsis	Log information on detecting script runtime error
Context	debug python python-script <i>named-item</i> script-runtime-error
Tree	script-runtime-error
Notes	The following elements are part of a choice: script-all-info or (script-compile-error , script-export-variables , script-output , script-output-on-error , and script-runtime-error).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

router [[router-instance](#)] *string*

Synopsis	Enter the router list instance
Context	debug router <i>string</i>
Tree	router
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-instance] string

Synopsis	Router name or VPRN service name
Context	debug router string
Tree	router
MD-CLI default	Base
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

Synopsis	Enter the dhcp context
Context	debug router string dhcp
Tree	dhcp
Description	<p>Commands in this context enable DHCP debug for all packets in the specified routing instance or VPRN service, or for specific packets matching the specific MAC addresses, SAP identifiers, or interface names.</p> <p>When a DHCP packet matches a specified filter and is conforming the configured debug mode for that filter, the packet debug is available in the specified detail level. DHCP debug filter criteria are applied in the following order:</p> <ol style="list-style-type: none">1. MAC address2. SAP identifier3. interface names4. all packets <p>Up to 8 MAC address filters, 8 SAP identifier filters, 4 interface name filters, and 4 all-packet filters can be specified simultaneously across all routing instances and VPRN services.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router string dhcp all-packets
Tree	all-packets

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp all-packets detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp all-packets mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> dhcp interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> dhcp interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp interface <i>interface-name</i> detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp interface <i>interface-name</i> mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the mac list instance
Context	debug router <i>string</i> dhcp mac <i>mac-unicast-address-no-zero</i>
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *mac-unicast-address-no-zero*

Synopsis	MAC address matching the client hardware address field
Context	debug router <i>string</i> dhcp mac <i>mac-unicast-address-no-zero</i>
Tree	mac
String format	'ieeee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp mac <i>mac-unicast-address-no-zero</i> detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp mac <i>mac-unicast-address-no-zero</i> mode <i>keyword</i>
Tree	mode

Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	debug router <i>string dhcp sap sap</i>
Tree	sap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *sap*

Synopsis	SAP ID
Context	debug router <i>string dhcp sap sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string dhcp sap sap</i> detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode keyword

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp sap <i>sap</i> mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-server

Synopsis	Enter the dhcp-server context
Context	debug router <i>string</i> dhcp-server
Tree	dhcp-server
Description	Commands in this context enable debugging for a local DHCP server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv4 [[name](#)] *named-item*

Synopsis	Enter the dhcpv4 list instance
Context	debug router <i>string</i> dhcp-server dhcpv4 <i>named-item</i>
Tree	dhcpv4
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	DHCPv4 server name
Context	debug router <i>string</i> dhcp-server dhcpv4 <i>named-item</i>
Tree	dhcpv4

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router string dhcp-server dhcpv4 named-item all-packets
Tree	all-packets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level keyword

Synopsis	Detail level of the DHCP debug output
Context	debug router string dhcp-server dhcpv4 named-item all-packets detail-level keyword
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode keyword

Synopsis	DHCP packets present in the debug output
Context	debug router string dhcp-server dhcpv4 named-item all-packets mode keyword
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	dropped-only
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lease [[prefix](#)] *ipv4-prefix*

Synopsis Enter the **lease** list instance

Context [debug router string dhcp-server dhcpv4 named-item lease ipv4-prefix](#)

Tree [lease](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[prefix] *ipv4-prefix*

Synopsis IPv4 prefix

Context [debug router string dhcp-server dhcpv4 named-item lease ipv4-prefix](#)

Tree [lease](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail-level *keyword*

Synopsis Detail level of the DHCP debug output

Context [debug router string dhcp-server dhcpv4 named-item lease ipv4-prefix detail-level keyword](#)

Tree [detail-level](#)

Options high – High detail level output for debugging
medium – Medium detail level output for debugging
low – Low detail level output for debugging

Default medium

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis DHCP packets present in the debug output

Context [debug router string dhcp-server dhcpv4 named-item lease ipv4-prefix mode keyword](#)

Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	dropped-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [[mac-address](#)] *mac-address*

Synopsis	Enter the mac list instance
Context	debug router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> mac <i>mac-address</i>
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mac-address] *mac-address*

Synopsis	MAC address matching the client hardware address field
Context	debug router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> mac <i>mac-address</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp-server dhcpv4 <i>named-item</i> mac <i>mac-address</i> detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	medium
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis DHCP packets present in the debug output

Context [debug router](#) *string* [dhcp-server dhcpv4](#) *named-item* [mac](#) *mac-address* [mode](#) *keyword*

Tree [mode](#)

Options egress-ingress-and-dropped – Display egress, ingress, and dropped packets
dropped-only – Display dropped packets only
ingress-and-dropped – Display ingress and dropped packets

Default dropped-only

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dhcpv6 [[name](#)] *named-item*

Synopsis Enter the **dhcpv6** list instance

Context [debug router](#) *string* [dhcp-server dhcpv6](#) *named-item*

Tree [dhcpv6](#)

Max. instances 4

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis DHCP server name

Context [debug router](#) *string* [dhcp-server dhcpv6](#) *named-item*

Tree [dhcpv6](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> all-packets
Tree	all-packets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> all-packets detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> all-packets mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	dropped-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease [[prefix](#)] *ipv6-prefix*

Synopsis	Enter the lease list instance
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> lease <i>ipv6-prefix</i>

Tree	lease
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] *ipv6-prefix*

Synopsis	IPv6 prefix
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> lease <i>ipv6-prefix</i>
Tree	lease
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> lease <i>ipv6-prefix</i> detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp-server dhcpv6 <i>named-item</i> lease <i>ipv6-prefix</i> mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	dropped-only
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

link-local-address [[address](#)] *ipv6-address*

Synopsis Enter the **link-local-address** list instance

Context [debug router](#) *string dhcp-server dhcpv6 named-item link-local-address ipv6-address*

Tree [link-local-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[address] *ipv6-address*

Synopsis Link local address

Context [debug router](#) *string dhcp-server dhcpv6 named-item link-local-address ipv6-address*

Tree [link-local-address](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail-level *keyword*

Synopsis Detail level of the DHCP debug output

Context [debug router](#) *string dhcp-server dhcpv6 named-item link-local-address ipv6-address detail-level keyword*

Tree [detail-level](#)

Options high – High detail level output for debugging
medium – Medium detail level output for debugging
low – Low detail level output for debugging

Default medium

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis DHCP packets present in the debug output

Context	<code>debug router string dhcp-server dhcpv6 named-item link-local-address ipv6-address mode keyword</code>
Tree	<code>mode</code>
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	dropped-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	<code>debug router string dhcp6</code>
Tree	<code>dhcp6</code>
Description	Commands in this context enable DHCPv6 debugging with optional interface, SAP, and client-identifier match criteria to filter debug output.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	<code>debug router string dhcp6 all-packets</code>
Tree	<code>all-packets</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level keyword

Synopsis	Detail level of the DHCP debug output
Context	<code>debug router string dhcp6 all-packets detail-level keyword</code>
Tree	<code>detail-level</code>
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp6 all-packets mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-identifier

Synopsis	Enter the client-identifier context
Context	debug router <i>string</i> dhcp6 client-identifier
Tree	client-identifier
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid [[duid](#)] *hex-string*

Synopsis	Enter the duid list instance
Context	debug router <i>string</i> dhcp6 client-identifier duid <i>hex-string</i>
Tree	duid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[duid] *hex-string*

Synopsis	Client DUID to match
Context	debug router <i>string</i> dhcp6 client-identifier duid <i>hex-string</i>
Tree	duid

String length	1 to 260
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCPv6 debug output
Context	debug router string dhcp6 client-identifier duid hex-string detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level for debugging medium – Medium detail level for debugging low – Low detail level for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *hex-string*

Synopsis	Mask for partial client DUID matching
Context	debug router string dhcp6 client-identifier duid hex-string mask <i>hex-string</i>
Tree	mask
String length	1 to 260
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCPv6 packets present in the debug output
Context	debug router string dhcp6 client-identifier duid hex-string mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display ingress, egress, and dropped packets dropped-only – Display ingress, egress, and dropped packets ingress-and-dropped – Display only ingress and dropped packets

Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-layer-address [*lla-id*] *hex-string*

Synopsis	Enter the link-layer-address list instance
Context	debug router <i>string</i> dhcp6 client-identifier link-layer-address <i>hex-string</i>
Tree	link-layer-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lla-id] *hex-string*

Synopsis	Link layer address matching DUID-LLT or DUID-LL
Context	debug router <i>string</i> dhcp6 client-identifier link-layer-address <i>hex-string</i>
Tree	link-layer-address
String length	1 to 252
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp6 client-identifier link-layer-address <i>hex-string</i> detail-level <i>keyword</i>
Tree	detail-level
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	<code>debug router string dhcp6 client-identifier link-layer-address hex-string mode keyword</code>
Tree	<code>mode</code>
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [`interface-name`] *interface-name*

Synopsis	Enter the interface list instance
Context	<code>debug router string dhcp6 interface interface-name</code>
Tree	<code>interface</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	<code>debug router string dhcp6 interface interface-name</code>
Tree	<code>interface</code>
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	<code>debug router string dhcp6 interface interface-name detail-level keyword</code>
Tree	<code>detail-level</code>

Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp6 interface <i>interface-name</i> mode <i>keyword</i>
Tree	mode
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	debug router <i>string</i> dhcp6 sap <i>sap</i>
Tree	sap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *sap*

Synopsis	SAP ID
Context	debug router <i>string</i> dhcp6 sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level keyword

Synopsis	Detail level of the DHCP debug output
Context	<code>debug router string dhcp6 sap sap detail-level keyword</code>
Tree	<code>detail-level</code>
Options	high – High detail level output for debugging medium – Medium detail level output for debugging low – Low detail level output for debugging
Default	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode keyword

Synopsis	DHCP packets present in the debug output
Context	<code>debug router string dhcp6 sap sap mode keyword</code>
Tree	<code>mode</code>
Options	egress-ingress-and-dropped – Display egress, ingress, and dropped packets dropped-only – Display dropped packets only ingress-and-dropped – Display ingress and dropped packets
Default	egress-ingress-and-dropped
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp

Synopsis	Enter the igmp context
Context	<code>debug router string igmp</code>
Tree	<code>igmp</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-interface

Synopsis	Enable the group-interface context
Context	<code>debug router string igmp group-interface</code>

Tree	group-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-group-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> igmp group-interface all-group-interfaces
Tree	all-group-interfaces
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host

Synopsis	Enable the host context
Context	debug router <i>string</i> igmp host
Tree	host
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv4-address*

Synopsis	IP address of the host to trace
Context	debug router <i>string</i> igmp host ip-address <i>ipv4-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Enable the interface context
Context	debug router <i>string</i> igmp interface

Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> igmp interface all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> igmp interface interface-name interface-name
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcs

Synopsis	Enable the mcs context
Context	debug router <i>string</i> igmp mcs
Tree	mcs
Description	Commands in this context enable debugging for IGMP multicast servers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> igmp mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> igmp mcs interface-name interface-name
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

miscellaneous *boolean*

Synopsis	Enable tracing of miscellaneous events
Context	debug router <i>string</i> igmp miscellaneous boolean
Tree	miscellaneous
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> igmp packet
Tree	packet

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Trace all origins
Context	debug router <i>string</i> igmp packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug router <i>string</i> igmp packet dropped <i>boolean</i>
Tree	dropped
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router <i>string</i> igmp packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-ip-address *ipv4-address*

Synopsis	Address of the host to trace
Context	debug router <i>string</i> igmp packet host-ip-address <i>ipv4-address</i>

Tree	host-ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router <i>string</i> igmp packet ingress <i>boolean</i>
Tree	ingress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-ip-address *ipv4-address*

Synopsis	Source address of the packet to trace
Context	debug router <i>string</i> igmp packet interface-ip-address <i>ipv4-address</i>
Tree	interface-ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> igmp packet interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32

Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Packet type to trace
Context	debug router <i>string</i> igmp packet type <i>keyword</i>
Tree	type
Options	all – All IGMP packets query – IGMP Query packets v1-report – IGMP version 1 Report packets v2-report – IGMP version 2 Report packets v2-leave – IGMP version 2 Leave packets v3-report – IGMP version 3 Report packets
Default	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Enter the ip context
Context	debug router <i>string</i> ip
Tree	ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	debug router <i>string</i> ip icmp
Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string</i> ip icmp all-packets
Tree	all-packets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Add a list entry for interface
Context	debug router <i>string</i> ip icmp interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[interface-name](#)] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> ip icmp interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp6

Synopsis	Enter the icmp6 context
Context	debug router <i>string</i> ip icmp6
Tree	icmp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string</i> ip icmp6 all-packets
Tree	all-packets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Add a list entry for interface
Context	debug router <i>string</i> ip icmp6 interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[interface-name](#)] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> ip icmp6 interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-events

Synopsis	Enter the interface-events context
Context	debug router <i>string</i> ip interface-events
Tree	interface-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-events

Synopsis	Enable the all-events context
Context	debug router <i>string</i> ip interface-events all-events
Tree	all-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Add a list entry for interface
Context	debug router <i>string</i> ip interface-events interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[interface-name](#)] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> ip interface-events interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enter the neighbor context
Context	debug router <i>string</i> ip neighbor
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-events

Synopsis	Enable the all-events context
Context	debug router <i>string</i> ip neighbor all-events
Tree	all-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip neighbor all-events address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> ip neighbor interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> ip neighbor interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-family keyword

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip neighbor interface <i>interface-name</i> address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enter the packet context
Context	debug router <i>string</i> ip packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string</i> ip packet all-packets
Tree	all-packets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-family keyword

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip packet all-packets address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

headers *boolean*

Synopsis	Display information associated with packet header only
Context	debug router <i>string ip packet all-packets headers boolean</i>
Tree	headers
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-id *number*

Synopsis	IP protocol ID to trace
Context	debug router <i>string ip packet all-packets protocol-id number</i>
Tree	protocol-id
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	debug router <i>string ip packet interface interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	debug router <i>string ip packet interface interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip packet interface <i>interface-name</i> address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

headers *boolean*

Synopsis	Display information associated with packet header only
Context	debug router <i>string</i> ip packet interface <i>interface-name</i> headers <i>boolean</i>
Tree	headers
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-id *number*

Synopsis	IP protocol ID to trace
Context	debug router <i>string</i> ip packet interface <i>interface-name</i> protocol-id <i>number</i>
Tree	protocol-id
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table

Synopsis	Enable the route-table context
Context	debug router <i>string</i> ip route-table
Tree	route-table
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Allow trace for all route updates
Context	debug router <i>string</i> ip route-table all
Tree	all
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	debug router <i>string</i> ip route-table filter
Tree	filter
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	debug router <i>string</i> ip route-table filter ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[prefix](#)] *ipv4-prefix*

Synopsis	Enter the prefix list instance
Context	debug router <i>string</i> ip route-table filter ipv4 prefix <i>ipv4-prefix</i>
Tree	prefix
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix] ipv4-prefix

Synopsis	IPv4 prefix
Context	debug router <i>string</i> ip route-table filter ipv4 prefix <i>ipv4-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

longest-prefix-match boolean

Synopsis	Allow match for greatest prefix values
Context	debug router <i>string</i> ip route-table filter ipv4 prefix <i>ipv4-prefix</i> longest-prefix-match <i>boolean</i>
Tree	longest-prefix-match
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	debug router <i>string</i> ip route-table filter ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [prefix] ipv6-prefix

Synopsis	Enter the prefix list instance
Context	debug router <i>string</i> ip route-table filter ipv6 prefix <i>ipv6-prefix</i>
Tree	prefix
Max. instances	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[prefix] *ipv6-prefix*

Synopsis IPv6 prefix

Context [debug router](#) *string* [ip route-table filter ipv6 prefix](#) *ipv6-prefix*

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

longest-prefix-match *boolean*

Synopsis Allow match for greatest prefix values

Context [debug router](#) *string* [ip route-table filter ipv6 prefix](#) *ipv6-prefix* [longest-prefix-match](#) *boolean*

Tree [longest-prefix-match](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tunnel-table

Synopsis Enable the **tunnel-table** context

Context [debug router](#) *string* [ip tunnel-table](#)

Tree [tunnel-table](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Allow trace for all tunnel updates

Context [debug router](#) *string* [ip tunnel-table](#) **all**

Tree [all](#)

Notes The following elements are part of a mandatory choice: **all** or **filter**.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	debug router <i>string</i> ip tunnel-table filter
Tree	filter
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id

Synopsis	Enter the id context
Context	debug router <i>string</i> ip tunnel-table filter id
Tree	id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-id *number*

Synopsis	SDP ID for tracing
Context	debug router <i>string</i> ip tunnel-table filter id sdp-id <i>number</i>
Tree	sdp-id
Range	1 to 32767
Notes	The following elements are part of a choice: sdp-id or tunnel-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-id *number*

Synopsis	Tunnel ID for tracing
Context	debug router <i>string</i> ip tunnel-table filter id tunnel-id <i>number</i>
Tree	tunnel-id

Max. range	0 to 4294967295
Notes	The following elements are part of a choice: sdp-id or tunnel-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	debug router <i>string ip tunnel-table filter ipv4</i>
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[prefix](#)] *ipv4-prefix*

Synopsis	Enter the prefix list instance
Context	debug router <i>string ip tunnel-table filter ipv4 prefix ipv4-prefix</i>
Tree	prefix
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[prefix](#)] *ipv4-prefix*

Synopsis	IPv4 prefix
Context	debug router <i>string ip tunnel-table filter ipv4 prefix ipv4-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
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Context	debug router <i>string</i> ip tunnel-table filter ipv4 prefix <i>ipv4-prefix</i> longest-prefix-match <i>boolean</i>
Tree	longest-prefix-match
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-type (*keyword* | *keyword*)

Synopsis	Tunnel type
Context	debug router <i>string</i> ip tunnel-table filter ipv4 prefix <i>ipv4-prefix</i> tunnel-type (<i>keyword</i> <i>keyword</i>)
Tree	tunnel-type
Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy, vxlan, srv6, srv6-isis-fb
Options	all
Default	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	debug router <i>string</i> ip tunnel-table filter ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[prefix](#)] *ipv6-prefix*

Synopsis	Enter the prefix list instance
Context	debug router <i>string</i> ip tunnel-table filter ipv6 prefix <i>ipv6-prefix</i>
Tree	prefix
Max. instances	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[**prefix**] *ipv6-prefix*

Synopsis IPv6 prefix

Context [debug router](#) *string* [ip tunnel-table filter ipv6 prefix](#) *ipv6-prefix*

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

longest-prefix-match *boolean*

Synopsis Allow match for greatest prefix values

Context [debug router](#) *string* [ip tunnel-table filter ipv6 prefix](#) *ipv6-prefix* [longest-prefix-match](#) *boolean*

Tree [longest-prefix-match](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tunnel-type (*keyword* | *keyword*)

Synopsis Tunnel type

Context [debug router](#) *string* [ip tunnel-table filter ipv6 prefix](#) *ipv6-prefix* [tunnel-type](#) (*keyword* | *keyword*)

Tree [tunnel-type](#)

Options none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy, vxlan, srv6, srv6-isis-fb

Options all

Default all

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ldp

Synopsis	Enter the ldp context
Context	debug router <i>string</i> ldp
Tree	ldp
Description	Commands in this context configure LDP command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> ldp interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[interface-name](#)] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> ldp interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enable the ipv4 context
Context	debug router <i>string</i> ldp interface <i>interface-name</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event

Synopsis	Enter the event context
Context	debug router string ldp interface interface-name ipv4 event
Tree	event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

messages

Synopsis	Enable the messages context
Context	debug router string ldp interface interface-name ipv4 event messages
Tree	messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enter the packet context
Context	debug router string ldp interface interface-name ipv4 packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello

Synopsis	Enable the hello context
Context	debug router string ldp interface interface-name ipv4 packet hello
Tree	hello
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Display detailed information
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Context	<code>debug router string ldp interface interface-name ipv4 packet hello detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	<code>debug router string ldp interface interface-name ipv6</code>
Tree	<code>ipv6</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event

Synopsis	Enter the event context
Context	<code>debug router string ldp interface interface-name ipv6 event</code>
Tree	<code>event</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

messages

Synopsis	Enable the messages context
Context	<code>debug router string ldp interface interface-name ipv6 event messages</code>
Tree	<code>messages</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enter the packet context
Context	<code>debug router string ldp interface interface-name ipv6 packet</code>
Tree	<code>packet</code>

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

hello

Synopsis Enable the **hello** context
Context [debug router string ldp interface interface-name ipv6 packet hello](#)
Tree [hello](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

detail *boolean*

Synopsis Display detailed information
Context [debug router string ldp interface interface-name ipv6 packet hello detail boolean](#)
Tree [detail](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Enter the **peer** list instance
Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [peer](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis Peer IP address
Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [peer](#)
Notes This element is part of a list key.
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event

Synopsis Enter the **event** context

Context [debug router string ldp peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [event](#)

Tree [event](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bindings

Synopsis Enable the **bindings** context

Context [debug router string ldp peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [event](#) [bindings](#)

Tree [bindings](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

messages

Synopsis Enable the **messages** context

Context [debug router string ldp peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [event](#) [messages](#)

Tree [messages](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

packet

Synopsis Enter the **packet** context

Context [debug router string ldp peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [packet](#)

Tree [packet](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello

Synopsis	Enable the hello context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet hello
Tree	hello
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Display detailed information
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet hello detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init

Synopsis	Enable the init context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet init
Tree	init
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Display detailed information
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet init detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive

Synopsis	Enable the keepalive context
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet keepalive
Tree	keepalive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label

Synopsis	Enable the label context
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet label
Tree	label
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Display detailed information
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet label detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld

Synopsis	Enter the mld context
Context	debug router <i>string</i> mld
Tree	mld
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-interface

Synopsis	Enable the group-interface context
Context	debug router <i>string</i> mld group-interface
Tree	group-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-group-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> mld group-interface all-group-interfaces
Tree	all-group-interfaces
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host

Synopsis	Enable the host context
Context	debug router <i>string</i> mld host
Tree	host
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv6-address*

Synopsis	IP address of the host to trace
Context	debug router <i>string</i> mld host ip-address <i>ipv6-address</i>
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Enable the interface context
Context	debug router <i>string</i> mld interface
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> mld interface all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> mld interface interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcs

Synopsis	Enable the mcs context
Context	debug router <i>string</i> mld mcs
Tree	mcs
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

all-interfaces

Synopsis Trace all interfaces

Context [debug router string mld mcs all-interfaces](#)

Tree [all-interfaces](#)

Notes The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis Interface name

Context [debug router string mld mcs interface-name interface-name](#)

Tree [interface-name](#)

String length 1 to 32

Notes The following elements are part of a mandatory choice: **all-interfaces** or **interface-name**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

miscellaneous *boolean*

Synopsis Enable the tracing of miscellaneous events

Context [debug router string mld miscellaneous boolean](#)

Tree [miscellaneous](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

packet

Synopsis Enable the **packet** context

Context [debug router string mld packet](#)

Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Allow trace for all origins
Context	debug router <i>string</i> mld packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug router <i>string</i> mld packet dropped <i>boolean</i>
Tree	dropped
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router <i>string</i> mld packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-ip-address *ipv6-address*

Synopsis	Address of the host to trace
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Context	<code>debug router string mld packet host-ip-address ipv6-address</code>
Tree	<code>host-ip-address</code>
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	<code>debug router string mld packet ingress boolean</code>
Tree	<code>ingress</code>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-ip-address *ipv6-address*

Synopsis	Source address of the packet to trace
Context	<code>debug router string mld packet interface-ip-address ipv6-address</code>
Tree	<code>interface-ip-address</code>
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	<code>debug router string mld packet interface-name interface-name</code>
Tree	<code>interface-name</code>
String length	1 to 32
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

type keyword

Synopsis Packet type

Context [debug router](#) *string* [mld](#) [packet](#) [type](#) *keyword*

Tree [type](#)

Options all – All MLD packets
query – MLD Query packets
v1-report – MLD version 1 Report packets
v2-report – MLD version 2 Report packets

Default all

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

msdp

Synopsis Enter the **msdp** context

Context [debug router](#) *string* [msdp](#)

Tree [msdp](#)

Description Commands in this context configure debugging for the Multicast Source Discovery Protocol (MSDP).

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

packet

Synopsis Enable the **packet** context

Context [debug router](#) *string* [msdp](#) [packet](#)

Tree [packet](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all-packet-types

Synopsis Enable MSDP debugging for all packets

Context	debug router string msdp packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-types

Synopsis	Enter the packet-types context
Context	debug router string msdp packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keep-alive

Synopsis	Enable the keep-alive context
Context	debug router string msdp packet packet-types keep-alive
Tree	keep-alive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types keep-alive peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sa-request

Synopsis	Enable the sa-request context
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Context	debug router string msdp packet packet-types sa-request
Tree	sa-request
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types sa-request peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sa-response

Synopsis	Enable the sa-response context
Context	debug router string msdp packet packet-types sa-response
Tree	sa-response
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types sa-response peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-active

Synopsis	Enable the source-active context
Context	debug router string msdp packet packet-types source-active
Tree	source-active

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Peer address used to trace packets
Context	debug router <i>string</i> msdp packet packet-types source-active peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enable the pim context
Context	debug router <i>string</i> msdp pim
Tree	pim
Description	Commands in this context enable MSDP PIM debugging.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address *ipv4-multicast-address*

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> msdp pim group-address <i>ipv4-multicast-address</i>
Tree	group-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtm

Synopsis	Enable the rtm context
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Context	debug router string msdp rtm
Tree	rtm
Description	Commands in this context enable MSDP route table manager (RTM) debugging.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-address *ipv4-address*

Synopsis	IP multicast RP address used to trace events
Context	debug router string msdp rtm rp-address ipv4-address
Tree	rp-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sa-db

Synopsis	Enable the sa-db context
Context	debug router string msdp sa-db
Tree	sa-db
Description	Commands in this context enable MSDP source-active database debugging.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address *ipv4-multicast-address*

Synopsis	IP multicast group address used to trace events
Context	debug router string msdp sa-db group-address ipv4-multicast-address
Tree	group-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-address *ipv4-address*

Synopsis	IP multicast RP address used to trace events
Context	<code>debug router string msdp sa-db rp-address ipv4-address</code>
Tree	<code>rp-address</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address *ipv4-address*

Synopsis	Source address used to trace events
Context	<code>debug router string msdp sa-db source-address ipv4-address</code>
Tree	<code>source-address</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtrace

Synopsis	Enter the mtrace context
Context	<code>debug router string mtrace</code>
Tree	<code>mtrace</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

miscellaneous

Synopsis	Enable the miscellaneous context
Context	<code>debug router string mtrace miscellaneous</code>
Tree	<code>miscellaneous</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> mtrace packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router <i>string</i> mtrace packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> mtrace packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query *boolean*

Synopsis	Debug query packets
Context	debug router <i>string</i> mtrace packet packet-types query <i>boolean</i>
Tree	query
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

request *boolean*

Synopsis	Debug request packets
Context	debug router <i>string</i> mtrace packet packet-types request <i>boolean</i>
Tree	request
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

response *boolean*

Synopsis	Debug response packets
Context	debug router <i>string</i> mtrace packet packet-types response <i>boolean</i>
Tree	response
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtrace2

Synopsis	Enter the mtrace2 context
Context	debug router <i>string</i> mtrace2
Tree	mtrace2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

miscellaneous

Synopsis	Enable the miscellaneous context
Context	debug router <i>string</i> mtrace2 miscellaneous
Tree	miscellaneous
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> mtrace2 packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router <i>string</i> mtrace2 packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> mtrace2 packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query *boolean*

Synopsis	Debug query packets
Context	debug router <i>string</i> mtrace2 packet packet-types query <i>boolean</i>
Tree	query
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

request *boolean*

Synopsis	Debug request packets
Context	debug router <i>string</i> mtrace2 packet packet-types request <i>boolean</i>
Tree	request
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

response *boolean*

Synopsis	Debug response packets
Context	debug router <i>string</i> mtrace2 packet packet-types response <i>boolean</i>
Tree	response
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf [[ospf-instance](#)] *number*

Synopsis	Enter the ospf list instance
Context	debug router <i>string</i> ospf <i>number</i>
Tree	ospf
Description	Commands in this context configure debugging for OSPF.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[ospf-instance](#)] *number*

Synopsis	OSPF ID
Context	debug router <i>string</i> ospf <i>number</i>
Tree	ospf
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

area

Synopsis Enable the **area** context

Context [debug router string ospf number area](#)

Tree [area](#)

Description Commands in this context configure debugging for an OSPF area.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Debug all OSPF areas

Context [debug router string ospf number area all](#)

Tree [all](#)

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

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

area-id ipv4-address

Synopsis OSPF area ID

Context [debug router string ospf number area area-id ipv4-address](#)

Tree [area-id](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

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

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

area-range

Synopsis Enable the **area-range** context

Context [debug router string ospf number area-range](#)

Tree	area-range
Description	Commands in this context configure debugging for an OSPF area range.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all OSPF area ranges
Context	debug router <i>string</i> ospf <i>number</i> area-range all
Tree	all
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range-address *ipv4-address*

Synopsis	OSPF area range address
Context	debug router <i>string</i> ospf <i>number</i> area-range range-address <i>ipv4-address</i>
Tree	range-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cspf

Synopsis	Enable the cspf context
Context	debug router <i>string</i> ospf <i>number</i> cspf
Tree	cspf
Description	Commands in this context configure debugging for an OSPF constraint-based SPF (CSPF).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all CSPFs
Context	debug router <i>string</i> ospf <i>number</i> cspf all
Tree	all
Notes	The following elements are part of a choice: all or cspf-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cspf-addr *ipv4-address*

Synopsis	CSPF destination address
Context	debug router <i>string</i> ospf <i>number</i> cspf cspf-addr <i>ipv4-address</i>
Tree	cspf-addr
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or cspf-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart *boolean*

Synopsis	Debug OSPF graceful restart
Context	debug router <i>string</i> ospf <i>number</i> graceful-restart <i>boolean</i>
Tree	graceful-restart
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Enable the interface context
Context	debug router <i>string</i> ospf <i>number</i> interface
Tree	interface
Description	Commands in this context configure debugging for an OSPF interface.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface-ip-address *ipv4-address*

Synopsis OSPF interface address
Context [debug router](#) *string* [ospf number](#) [interface](#) [interface-ip-address](#) *ipv4-address*
Tree [interface-ip-address](#)
String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes The following elements are part of a choice: **interface-ip-address** or **interface-name**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface-name *string*

Synopsis OSPF interface name
Context [debug router](#) *string* [ospf number](#) [interface](#) [interface-name](#) *string*
Tree [interface-name](#)
Notes The following elements are part of a choice: **interface-ip-address** or **interface-name**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

leak

Synopsis Enable the **leak** context
Context [debug router](#) *string* [ospf number](#) [leak](#)
Tree [leak](#)
Description Commands in this context configure debugging for OSPF leaks.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

all

Synopsis Debug all external route leaks

Context	<code>debug router string ospf number leak all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-addr *ipv4-address*

Synopsis	OSPF destination address
Context	<code>debug router string ospf number leak dest-addr ipv4-address</code>
Tree	<code>dest-addr</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsdb

Synopsis	Enable the lsdb context
Context	<code>debug router string ospf number lsdb</code>
Tree	<code>lsdb</code>
Description	Commands in this context configure debugging for an OSPF link-state database (LSDB).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-rtr-id *ipv4-address*

Synopsis	LSDB advertising router ID
Context	<code>debug router string ospf number lsdb adv-rtr-id ipv4-address</code>
Tree	<code>adv-rtr-id</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

area *ipv4-address*

Synopsis LSDB area ID

Context [debug router string ospf number lsdb area ipv4-address](#)

Tree [area](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ls-id *ipv4-address*

Synopsis LSDB LS ID

Context [debug router string ospf number lsdb ls-id ipv4-address](#)

Tree [ls-id](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ls-type *keyword*

Synopsis LSDB type

Context [debug router string ospf number lsdb ls-type keyword](#)

Tree [ls-type](#)

Options router, network, summary, asbr, external, nssa, link-opaque, area-opaque, as-opaque

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

misc *boolean*

Synopsis Debug OSPF miscellaneous events

Context [debug router string ospf number misc boolean](#)

Tree [misc](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enable the neighbor context
Context	debug router <i>string</i> ospf number neighbor
Tree	neighbor
Description	Commands in this context configure debugging for an OSPF neighbor.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-ip-address *ipv4-address*

Synopsis	OSPF neighbor interface address
Context	debug router <i>string</i> ospf number neighbor interface-ip-address <i>ipv4-address</i>
Tree	interface-ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: interface-ip-address or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *string*

Synopsis	OSPF neighbor interface name
Context	debug router <i>string</i> ospf number neighbor interface-name <i>string</i>
Tree	interface-name
Notes	The following elements are part of a choice: interface-ip-address or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nssa-range

Synopsis	Enable the nssa-range context
Context	debug router string ospf number nssa-range
Tree	nssa-range
Description	Commands in this context configure debugging for a Not-So-Stubby area (NSSA) range.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all OSPF NSSA ranges
Context	debug router string ospf number nssa-range all
Tree	all
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range-address ipv4-address

Synopsis	OSPF NSSA range address
Context	debug router string ospf number nssa-range range-address ipv4-address
Tree	range-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug router string ospf number packet
Tree	packet
Description	Commands in this context configure debugging for OSPF packets.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

detail *boolean*

Synopsis Display detailed debug information
Context [debug router](#) *string* [ospf](#) *number* [packet detail](#) *boolean*
Tree [detail](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

direction *keyword*

Synopsis OSPF packet direction
Context [debug router](#) *string* [ospf](#) *number* [packet direction](#) *keyword*
Tree [direction](#)
Options both, ingress, egress, dropped
Default both
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [ospf](#) *number* [packet interface-name](#) *string*
Tree [interface-name](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

packet-type *keyword*

Synopsis Packet type
Context [debug router](#) *string* [ospf](#) *number* [packet packet-type](#) *keyword*
Tree [packet-type](#)
Options hello, db-description, ls-request, ls-update, ls-ack

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-shortcut

Synopsis	Enable the rsvp-shortcut context
Context	debug router string ospf number rsvp-shortcut
Tree	rsvp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all RSVP shortcuts
Context	debug router string ospf number rsvp-shortcut all
Tree	all
Notes	The following elements are part of a choice: all or rsvp-ep .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-ep ipv4-address

Synopsis	RSVP shortcut endpoint
Context	debug router string ospf number rsvp-shortcut rsvp-ep ipv4-address
Tree	rsvp-ep
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or rsvp-ep .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtm

Synopsis	Enable the rtm context
Context	debug router string ospf number rtm

Tree	rtm
Description	Commands in this context configure debugging for the OSPF Routing Table Manager (RTM).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug the RTM for all destinations
Context	debug router <i>string</i> ospf <i>number</i> rtm all
Tree	all
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-addr *ipv4-address*

Synopsis	RTM destination address
Context	debug router <i>string</i> ospf <i>number</i> rtm dest-addr <i>ipv4-address</i>
Tree	dest-addr
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sham-neighbor

Synopsis	Enable the sham-neighbor context
Context	debug router <i>string</i> ospf <i>number</i> sham-neighbor
Tree	sham-neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug the shamlink neighbor for all addresses
Context	<code>debug router string ospf number sham-neighbor all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-addr ipv4-address

Synopsis	Shamlink neighbor address
Context	<code>debug router string ospf number sham-neighbor dest-addr ipv4-address</code>
Tree	<code>dest-addr</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf

Synopsis	Enable the spf context
Context	<code>debug router string ospf number spf</code>
Tree	<code>spf</code>
Description	Commands in this context configure debugging for OSPF SPF. Debug information about overall SPF start and stop times are shown. To view detailed information about calculating the SPF of a specific route, the route must be specified as an optional argument.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug the SPF for any destination address
Context	<code>debug router string ospf number spf all</code>

Tree	all
Notes	The following elements are part of a choice: all or destination-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-address *ipv4-address*

Synopsis	OSPF SPF destination address
Context	debug router <i>string</i> ospf <i>number</i> spf destination-address <i>ipv4-address</i>
Tree	destination-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or destination-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	OSPF SPF type
Context	debug router <i>string</i> ospf <i>number</i> spf type <i>keyword</i>
Tree	type
Options	intra-area, inter-area, external
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-endpoint

Synopsis	Enter the tunnel-endpoint context
Context	debug router <i>string</i> ospf <i>number</i> tunnel-endpoint
Tree	tunnel-endpoint
Description	Commands in this context configure debugging for an OSPF tunnel endpoint.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak

Synopsis	Enable the leak context
Context	<code>debug router string ospf number tunnel-endpoint leak</code>
Tree	<code>leak</code>
Description	Commands in this context configure debugging for OSPF tunnel-endpoint leaks.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug OSPF leaked tunnels for all tunnel endpoints
Context	<code>debug router string ospf number tunnel-endpoint leak all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or tunnel-endpoint .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-endpoint ipv4-address

Synopsis	OSPF leaked tunnel endpoint
Context	<code>debug router string ospf number tunnel-endpoint leak tunnel-endpoint ipv4-address</code>
Tree	<code>tunnel-endpoint</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or tunnel-endpoint .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf

Synopsis	Enable the spf context
Context	<code>debug router string ospf number tunnel-endpoint spf</code>
Tree	<code>spf</code>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Debug SPF for all tunnel-endpoint destination addresses

Context [debug router string ospf number tunnel-endpoint spf all](#)

Tree [all](#)

Notes The following elements are part of a choice: **all** or **spf-endpoint**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

spf-endpoint ipv4-address

Synopsis SPF tunnel-endpoint destination address

Context [debug router string ospf number tunnel-endpoint spf spf-endpoint ipv4-address](#)

Tree [spf-endpoint](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: **all** or **spf-endpoint**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

virtual-neighbor

Synopsis Enable the **virtual-neighbor** context

Context [debug router string ospf number virtual-neighbor](#)

Tree [virtual-neighbor](#)

Description Commands in this context configure debugging for an OSPF virtual neighbor.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Debug the virtual neighbor for all router IDs

Context [debug router string ospf number virtual-neighbor all](#)

Tree	all
Notes	The following elements are part of a choice: all or neighbor-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-id *ipv4-address*

Synopsis	Virtual neighbor router ID
Context	debug router <i>string</i> ospf <i>number</i> virtual-neighbor neighbor-id <i>ipv4-address</i>
Tree	neighbor-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or neighbor-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf3 [[ospf-instance](#)] *number*

Synopsis	Enter the ospf3 list instance
Context	debug router <i>string</i> ospf3 <i>number</i>
Tree	ospf3
Description	Commands in this context configure debugging for OSPF3.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPF3 ID
Context	debug router <i>string</i> ospf3 <i>number</i>
Tree	ospf3
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area

Synopsis	Enable the area context
Context	<code>debug router string ospf3 number area</code>
Tree	<code>area</code>
Description	Commands in this context configure debugging for an OSPF3 area.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all OSPF3 areas
Context	<code>debug router string ospf3 number area all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or area-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-id ipv4-address

Synopsis	OSPF3 area ID
Context	<code>debug router string ospf3 number area area-id ipv4-address</code>
Tree	<code>area-id</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or area-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range

Synopsis	Enable the area-range context
Context	<code>debug router string ospf3 number area-range</code>
Tree	<code>area-range</code>
Description	Commands in this context configure debugging for an OSPF3 area range.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all OSPF3 area ranges
Context	debug router <i>string</i> ospf3 <i>number</i> area-range all
Tree	all
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	OSPF3 area range address
Context	debug router <i>string</i> ospf3 <i>number</i> area-range range-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	range-address
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart *boolean*

Synopsis	Debug OSPF graceful restart
Context	debug router <i>string</i> ospf3 <i>number</i> graceful-restart <i>boolean</i>
Tree	graceful-restart
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

Synopsis	Enable the interface context
Context	debug router <i>string</i> ospf3 <i>number</i> interface

Tree	interface
Description	Commands in this context configure debugging for an OSPF3 interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all OSPF3 interfaces
Context	debug router <i>string</i> ospf3 <i>number</i> interface all
Tree	all
Notes	The following elements are part of a choice: all or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *string*

Synopsis	OSPF3 interface name
Context	debug router <i>string</i> ospf3 <i>number</i> interface interface-name <i>string</i>
Tree	interface-name
Notes	The following elements are part of a choice: all or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak

Synopsis	Enable the leak context
Context	debug router <i>string</i> ospf3 <i>number</i> leak
Tree	leak
Description	Commands in this context configure debugging for OSPF3 leaks.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all external route leaks
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Context	debug router string ospf3 number leak all
Tree	all
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	OSPF3 destination address
Context	debug router string ospf3 number leak dest-addr (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	dest-addr
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsdb

Synopsis	Enable the lsdb context
Context	debug router string ospf3 number lsdb
Tree	lsdb
Description	Commands in this context configure debugging for an OSPF3 LSDB.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-rtr-id *ipv4-address*

Synopsis	LSDB advertising router ID
Context	debug router string ospf3 number lsdb adv-rtr-id <i>ipv4-address</i>
Tree	adv-rtr-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area *ipv4-address*

Synopsis	LSDB area ID
Context	<code>debug router string ospf3 number lsdb area ipv4-address</code>
Tree	<code>area</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ls-id *ipv4-address*

Synopsis	LSDB LS ID
Context	<code>debug router string ospf3 number lsdb ls-id ipv4-address</code>
Tree	<code>ls-id</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ls-type *keyword*

Synopsis	LSDB type
Context	<code>debug router string ospf3 number lsdb ls-type keyword</code>
Tree	<code>ls-type</code>
Options	router, network, inter-area-pfx, inter-area-rtr, nssa, intra-area-pfx, external, rtr-info-link, rtr-info-area, rtr-info-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

misc *boolean*

Synopsis	Debug OSPF miscellaneous events
Context	<code>debug router string ospf3 number misc boolean</code>
Tree	<code>misc</code>
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enable the neighbor context
Context	debug router <i>string</i> ospf3 <i>number</i> neighbor
Tree	neighbor
Description	Commands in this context configure debugging for an OSPF3 neighbor.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *string*

Synopsis	OSPF3 neighbor interface name
Context	debug router <i>string</i> ospf3 <i>number</i> neighbor interface-name <i>string</i>
Tree	interface-name
Notes	The following elements are part of a choice: interface-name or router-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *ipv4-address*

Synopsis	OSPF3 interface router ID
Context	debug router <i>string</i> ospf3 <i>number</i> neighbor router-id <i>ipv4-address</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: interface-name or router-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nssa-range

Synopsis	Enable the nssa-range context
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Context	debug router string ospf3 number nssa-range
Tree	nssa-range
Description	Commands in this context configure debugging for an NSSA range.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug all OSPF3 NSSA ranges
Context	debug router string ospf3 number nssa-range all
Tree	all
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	OSPF3 NSSA range address
Context	debug router string ospf3 number nssa-range range-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	range-address
Notes	The following elements are part of a choice: all or range-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug router string ospf3 number packet
Tree	packet
Description	Commands in this context configure debugging for OSPF3 packets.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Display detailed debug information
Context	debug router <i>string</i> ospf3 <i>number</i> packet detail <i>boolean</i>
Tree	detail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*

Synopsis	OSPF3 packet direction
Context	debug router <i>string</i> ospf3 <i>number</i> packet direction <i>keyword</i>
Tree	direction
Options	both, ingress, egress, dropped
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> ospf3 <i>number</i> packet interface-name <i>string</i>
Tree	interface-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-type *keyword*

Synopsis	Packet type
Context	debug router <i>string</i> ospf3 <i>number</i> packet packet-type <i>keyword</i>
Tree	packet-type
Options	hello, db-description, ls-request, ls-update, ls-ack
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtm

Synopsis	Enable the rtm context
Context	<code>debug router string ospf3 number rtm</code>
Tree	<code>rtm</code>
Description	Commands in this context configure debugging for the OSPF3 RTM.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug the RTM for all destinations
Context	<code>debug router string ospf3 number rtm all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	RTM destination address
Context	<code>debug router string ospf3 number rtm dest-addr (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)</code>
Tree	<code>dest-addr</code>
Notes	The following elements are part of a choice: all or dest-addr .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf

Synopsis	Enable the spf context
Context	<code>debug router string ospf3 number spf</code>
Tree	<code>spf</code>
Description	Commands in this context configure debugging for OSPF3 SPF. Debug information about overall SPF start and stop times are shown. To view detailed information about

calculating the SPF of a specific route, the route must be specified as an optional argument.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

all

Synopsis Debug the SPF for all destination addresses
Context `debug router string ospf3 number spf all`
Tree `all`
Notes The following elements are part of a choice: **all** or **destination-address**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

Synopsis OSPF3 SPF destination address
Context `debug router string ospf3 number spf destination-address (ipv4-address-no-zone | ipv6-address-no-zone)`
Tree `destination-address`
Notes The following elements are part of a choice: **all** or **destination-address**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

type keyword

Synopsis OSPF3 SPF type
Context `debug router string ospf3 number spf type keyword`
Tree `type`
Options intra-area, inter-area, external
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

tunnel-endpoint

Synopsis Enter the **tunnel-endpoint** context

Context	<code>debug router string ospf3 number tunnel-endpoint</code>
Tree	<code>tunnel-endpoint</code>
Description	Commands in this context configure debugging for an OSPF3 tunnel endpoint.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak

Synopsis	Enable the leak context
Context	<code>debug router string ospf3 number tunnel-endpoint leak</code>
Tree	<code>leak</code>
Description	Commands in this context configure debugging for OSPF3 tunnel-endpoint leaks.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug OSPF3 leaked tunnels for all tunnel endpoints
Context	<code>debug router string ospf3 number tunnel-endpoint leak all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or tunnel-endpoint .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	OSPF3 leaked tunnel endpoint
Context	<code>debug router string ospf3 number tunnel-endpoint leak tunnel-endpoint (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)</code>
Tree	<code>tunnel-endpoint</code>
Notes	The following elements are part of a choice: all or tunnel-endpoint .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf

Synopsis	Enable the spf context
Context	<code>debug router string ospf3 number tunnel-endpoint spf</code>
Tree	<code>spf</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug SPF for all tunnel-endpoint destination addresses
Context	<code>debug router string ospf3 number tunnel-endpoint spf all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or spf-endpoint .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	SPF tunnel-endpoint destination address
Context	<code>debug router string ospf3 number tunnel-endpoint spf spf-endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)</code>
Tree	<code>spf-endpoint</code>
Notes	The following elements are part of a choice: all or spf-endpoint .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-neighbor

Synopsis	Enable the virtual-neighbor context
Context	<code>debug router string ospf3 number virtual-neighbor</code>
Tree	<code>virtual-neighbor</code>
Description	Commands in this context configure debugging for an OSPF3 virtual neighbor.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug the virtual neighbor for all router IDs
Context	<code>debug router string ospf3 number virtual-neighbor all</code>
Tree	<code>all</code>
Notes	The following elements are part of a choice: all or neighbor-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-id ipv4-address

Synopsis	Virtual neighbor router ID
Context	<code>debug router string ospf3 number virtual-neighbor neighbor-id ipv4-address</code>
Tree	<code>neighbor-id</code>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: all or neighbor-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enter the pim context
Context	<code>debug router string pim</code>
Tree	<code>pim</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

events

Synopsis	Enable the events context
Context	<code>debug router string pim events</code>
Tree	<code>events</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency

Synopsis	Enable the adjacency context
Context	debug router string pim events adjacency
Tree	adjacency
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Enable the all context
Context	debug router string pim events all
Tree	all
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events all detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events all group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events all source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

assert

Synopsis	Enable the assert context
Context	debug router <i>string</i> pim events assert
Tree	assert
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events assert detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
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Context	<code>debug router string pim events assert group-address (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>group-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	<code>debug router string pim events assert source-address (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>source-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-rp

Synopsis	Enable the auto-rp context
Context	<code>debug router string pim events auto-rp</code>
Tree	<code>auto-rp</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp

Synopsis	Enable the bgp context
Context	<code>debug router string pim events bgp</code>
Tree	<code>bgp</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events bgp group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	BGP peer address used to trace events
Context	debug router <i>string</i> pim events bgp peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events bgp source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bier-inband

Synopsis	Enable the bier-inband context
Context	debug router <i>string</i> pim events bier-inband
Tree	bier-inband
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

detail *boolean*

Synopsis Enable detail tracing

Context [debug router](#) *string* [pim events bier-inband detail](#) *boolean*

Tree [detail](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bsr

Synopsis Enable the **bsr** context

Context [debug router](#) *string* [pim events bsr](#)

Tree [bsr](#)

Description Commands in this context enable debugging for the PIM bootstrap mechanism.

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail *boolean*

Synopsis Enable detail tracing

Context [debug router](#) *string* [pim events bsr detail](#) *boolean*

Tree [detail](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

data

Synopsis Enable the **data** context

Context	debug router string pim events data
Tree	data
Description	Commands in this context enable PIM data exception debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events data detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events data group-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug router string pim events data source-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

db

Synopsis	Enable the db context
Context	debug router string pim events db
Tree	db
Description	Commands in this context enable PIM database debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events db detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events db group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug router string pim events db source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynmldp

Synopsis	Enable the dynmldp context
Context	debug router <i>string</i> pim events dynmldp
Tree	dynmldp
Description	Commands in this context enable dynamic MLDP debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events dynmldp detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extranet

Synopsis	Enable the extranet context
Context	debug router <i>string</i> pim events extranet
Tree	extranet
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events extranet detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graft

Synopsis	Enable the graft context
Context	debug router <i>string</i> pim events graft
Tree	graft
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events graft detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events graft group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Source address used to trace events

Context [debug router string pim events graft source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface

Synopsis Enable the **interface** context

Context [debug router string pim events interface](#)

Tree [interface](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis Interface name

Context [debug router string pim events interface interface-name interface-name](#)

Tree [interface-name](#)

String length 1 to 32

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

jp

Synopsis Enable the **jp** context

Context [debug router string pim events jp](#)

Tree [jp](#)

Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events jp detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events jp group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events jp source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mofrr

Synopsis	Enable the mofrr context
Context	debug router string pim events mofrr
Tree	mofrr
Description	Commands in this context enable debugging for PIM Multicast-only Fast Reroute (MoFRR).
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrrib

Synopsis	Enable the mrrib context
Context	debug router string pim events mrrib
Tree	mrrib
Description	Commands in this context enable Multicast Routing Information Base (MRIB) debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events mrrib detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events mrrib group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	<code>debug router string pim events mrrib source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

msg

Synopsis	Enable the msg context
Context	<code>debug router string pim events msg</code>
Tree	<code>msg</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mvpn-rtcache

Synopsis	Enable the mvpn-rtcache context
Context	<code>debug router string pim events mvpn-rtcache</code>
Tree	<code>mvpn-rtcache</code>
Description	Commands in this context enable debugging for the PIM MVPN route cache.

Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Group address used to trace events
Context	<code>debug router string pim events mvpn-rtcache group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Peer address used to trace events
Context	<code>debug router string pim events mvpn-rtcache peer-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>peer-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

red

Synopsis	Enable the red context
Context	<code>debug router string pim events red</code>
Tree	<code>red</code>
Description	Commands in this context enable debugging for PIM redundancy messages to the standby CPM.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events red detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register

Synopsis	Enable the register context
Context	debug router <i>string</i> pim events register
Tree	register
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events register detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events register group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis Source address used to trace events

Context [debug router string pim events register source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rpfv

Synopsis Enable the **rpfv** context

Context [debug router string pim events rpfv](#)

Tree [rpfv](#)

Description Commands in this context enable PIM RPF vector debugging.

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynml dp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcach e**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail *boolean*

Synopsis Enable detail tracing

Context [debug router string pim events rpfv detail boolean](#)

Tree [detail](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rtm

Synopsis Enable the **rtm** context

Context [debug router string pim events rtm](#)

Tree	rtm
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events rtm detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

s-pmsi

Synopsis	Enable the s-pmsi context
Context	debug router <i>string</i> pim events s-pmsi
Tree	s-pmsi
Description	Commands in this context enable debugging for the PIM selective provider multicast service interface.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events s-pmsi detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis VPN source address used to trace events

Context [debug router string pim events s-pmsi vpn-source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [vpn-source-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tunnel-interface

Synopsis Enable the **tunnel-interface** context

Context [debug router string pim events tunnel-interface](#)

Tree [tunnel-interface](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ldp-p2mp-id *number*

Synopsis LDP P2MP ID

Context [debug router string pim events tunnel-interface ldp-p2mp-id](#) *number*

Tree [ldp-p2mp-id](#)

Range 1 to 8192

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sender-address *ipv4-unicast-address*

Synopsis IP address of the sender

Context [debug router string pim events tunnel-interface sender-address](#) *ipv4-unicast-address*

Tree [sender-address](#)

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug router string pim packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router string pim packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	debug router string pim packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router string pim packet egress <i>boolean</i>

Tree	egress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router <i>string</i> pim packet ingress <i>boolean</i>
Tree	ingress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable tracing for PIM IPv4 packets
Context	debug router <i>string</i> pim packet ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable tracing for PIM IPv6 packets
Context	debug router <i>string</i> pim packet ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> pim packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

assert

Synopsis	Enable the assert context
Context	debug router <i>string</i> pim packet packet-types assert
Tree	assert
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types assert all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types assert interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-rp-announcement

Synopsis	Enable the auto-rp-announcement context
Context	debug router <i>string</i> pim packet packet-types auto-rp-announcement
Tree	auto-rp-announcement
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types auto-rp-announcement all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types auto-rp-announcement interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-rp-mapping

Synopsis	Enable the auto-rp-mapping context
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping
Tree	auto-rp-mapping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsr

Synopsis	Enable the bsr context
Context	debug router <i>string</i> pim packet packet-types bsr

Tree	bsr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types bsr all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types bsr interface-name interface-name
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crp

Synopsis	Enable the crp context
Context	debug router <i>string</i> pim packet packet-types crp
Tree	crp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types crp all-origins

Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types crp interface-name interface-name
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graft

Synopsis	Enable the graft context
Context	debug router <i>string</i> pim packet packet-types graft
Tree	graft
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types graft all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
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Context	<code>debug router</code> <i>string</i> <code>pim packet packet-types graft interface-name interface-name</code>
Tree	<code>interface-name</code>
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graft-ack

Synopsis	Enable the graft-ack context
Context	<code>debug router</code> <i>string</i> <code>pim packet packet-types graft-ack</code>
Tree	<code>graft-ack</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	<code>debug router</code> <i>string</i> <code>pim packet packet-types graft-ack all-origins</code>
Tree	<code>all-origins</code>
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	<code>debug router</code> <i>string</i> <code>pim packet packet-types graft-ack interface-name interface-name</code>
Tree	<code>interface-name</code>
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello

Synopsis	Enable the hello context
Context	debug router <i>string</i> pim packet packet-types hello
Tree	hello
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types hello all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types hello interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

jp

Synopsis	Enable the jp context
Context	debug router <i>string</i> pim packet packet-types jp
Tree	jp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	<code>debug router string pim packet packet-types jp all-origins</code>
Tree	<code>all-origins</code>
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	<code>debug router string pim packet packet-types jp interface-name interface-name</code>
Tree	<code>interface-name</code>
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mdt-tlv

Synopsis	Enable the mdt-tlv context
Context	<code>debug router string pim packet packet-types mdt-tlv</code>
Tree	<code>mdt-tlv</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	<code>debug router string pim packet packet-types mdt-tlv all-origins</code>
Tree	<code>all-origins</code>
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types mdt-tlv interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register

Synopsis	Enable the register context
Context	debug router <i>string</i> pim packet packet-types register
Tree	register
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types register all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types register interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

register-stop

Synopsis Enable the **register-stop** context

Context [debug router string pim packet packet-types register-stop](#)

Tree [register-stop](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all-origins

Synopsis Enable trace for all origins

Context [debug router string pim packet packet-types register-stop all-origins](#)

Tree [all-origins](#)

Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*

Synopsis Interface name

Context [debug router string pim packet packet-types register-stop interface-name interface-name](#)

Tree [interface-name](#)

String length 1 to 32

Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

radius

Synopsis Enter the **radius** context

Context [debug router string radius](#)

Tree [radius](#)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

servers

Synopsis	Enable the servers context
Context	debug router <i>string</i> radius servers
Tree	servers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the attribute list instance
Context	debug router <i>string</i> radius servers attribute <i>string</i>
Tree	attribute
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *string*

Synopsis	Attribute filter name
Context	debug router <i>string</i> radius servers attribute <i>string</i>
Tree	attribute
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-type *number*

Synopsis	RADIUS attribute extended type
Context	debug router <i>string</i> radius servers attribute <i>string</i> extended-type <i>number</i>
Tree	extended-type

Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transaction *boolean*

Synopsis	Debug request and response transaction
Context	debug router <i>string</i> radius servers attribute <i>string</i> transaction <i>boolean</i>
Tree	transaction
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *number*

Synopsis	RADIUS attribute type
Context	debug router <i>string</i> radius servers attribute <i>string</i> type <i>number</i>
Tree	type
Range	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value

Synopsis	Enter the value context
Context	debug router <i>string</i> radius servers attribute <i>string</i> value
Tree	value
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Attribute value specified as an IP address
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Context	debug router <i>string</i> radius servers attribute <i>string</i> value address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex *hex-string*

Synopsis	Attribute value specified as a hexadecimal string
Context	debug router <i>string</i> radius servers attribute <i>string</i> value hex <i>hex-string</i>
Tree	hex
String length	1 to 253
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

integer *number*

Synopsis	Attribute value specified as an integer
Context	debug router <i>string</i> radius servers attribute <i>string</i> value integer <i>number</i>
Tree	integer
Max. range	0 to 4294967295
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Attribute value specified as an IP prefix
Context	debug router <i>string</i> radius servers attribute <i>string</i> value prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

string *string*

Synopsis Attribute value specified as a string

Context [debug router string radius servers attribute string value string string](#)

Tree [string](#)

String length 1 to 253

Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vendor-specific

Synopsis Enter the **vendor-specific** context

Context [debug router string radius servers attribute string vendor-specific](#)

Tree [vendor-specific](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

encoding

Synopsis Enter the **encoding** context

Context [debug router string radius servers attribute string vendor-specific encoding](#)

Tree [encoding](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

length-size *number*

Synopsis Size of the vendor-length field

Context [debug router string radius servers attribute string vendor-specific encoding length-size number](#)

Tree [length-size](#)

Range 0 to 2

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type-size *number*

Synopsis	Size of the vendor-type field
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific encoding type-size <i>number</i>
Tree	type-size
Range	1 to 4
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor (*number* | *keyword*)

Synopsis	RADIUS vendor ID
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-type *number*

Synopsis	RADIUS vendor specific type
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific vendor-type <i>number</i>
Tree	vendor-type
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail-level *keyword*

Synopsis	Detail level of the RADIUS debug output
Context	debug router <i>string</i> radius servers detail-level <i>keyword</i>
Tree	detail-level
Options	low – Low detail level output for debugging medium – Medium detail level output for debugging high – High detail level output for debugging
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> radius servers packet-types
Tree	packet-types
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting *boolean*

Synopsis	Debug accounting packets
Context	debug router <i>string</i> radius servers packet-types accounting <i>boolean</i>
Tree	accounting
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication *boolean*

Synopsis	Debug authentication packets
Context	debug router <i>string</i> radius servers packet-types authentication <i>boolean</i>
Tree	authentication
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

coa *boolean*

Synopsis	Debug CoA and DM packets
Context	debug router <i>string</i> radius servers packet-types coa <i>boolean</i>
Tree	coa
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-address [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for server-address
Context	debug router <i>string</i> radius servers server-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server-address
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the RADIUS server
Context	debug router <i>string</i> radius servers server-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp

Synopsis	Enter the vrrp context
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Context	debug router string vrrp
Tree	vrrp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

events

Synopsis	Enter the events context
Context	debug router string vrrp events
Tree	events
Description	Commands in this context enable debugging for VRRP events and state changes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-events

Synopsis	Enable the all-events context
Context	debug router string vrrp events all-events
Tree	all-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	debug router string vrrp events interface interface-name
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[interface-name](#)] *interface-name*

Synopsis	Interface name
Context	debug router string vrrp events interface interface-name
Tree	interface

String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-vrids

Synopsis	Enable the all-vrids context
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> all-vrids
Tree	all-vrids
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> ipv4 vrid <i>number</i>
Tree	vrid
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis	Virtual router ID to debug
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> ipv4 vrid <i>number</i>

Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> ipv6 vrid <i>number</i>
Tree	vrid
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	debug router <i>string</i> vrrp events interface <i>interface-name</i> ipv6 vrid <i>number</i>
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enter the packet context
Context	debug router <i>string</i> vrrp packet
Tree	packet
Description	Commands in this context enable debugging for VRRP packet exchanges.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string</i> vrrp packet all-packets
Tree	all-packets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> vrrp packet interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[interface-name](#)] *interface-name*

Synopsis	Interface name
Context	debug router <i>string</i> vrrp packet interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-vrids

Synopsis	Enable the all-vrids context
Context	debug router string vrrp packet interface interface-name all-vrids
Tree	all-vrids
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	debug router string vrrp packet interface interface-name ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router string vrrp packet interface interface-name ipv4 vrid number
Tree	vrid
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[virtual-router-id](#)] *number*

Synopsis	Virtual router ID to debug
Context	debug router string vrrp packet interface interface-name ipv4 vrid number
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	debug router string vrrp packet interface interface-name ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router string vrrp packet interface interface-name ipv6 vrid number
Tree	vrid
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	debug router string vrrp packet interface interface-name ipv6 vrid number
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service

Synopsis	Enter the service context
Context	debug service
Tree	service
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpls [*service-name*] *service-name*

Synopsis	Enter the vpls list instance
Context	debug service vpls <i>service-name</i>
Tree	vpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] *service-name*

Synopsis	Administrative service name
Context	debug service vpls <i>service-name</i>
Tree	vpls
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	debug service vpls <i>service-name</i> igmp-snooping
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug service vpls <i>service-name</i> igmp-snooping packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail keyword

Synopsis	Detail level of the debug output
Context	debug service vpls <i>service-name</i> igmp-snooping packet detail <i>keyword</i>
Tree	detail
Options	low, medium, high
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dropped boolean

Synopsis	Enable tracing for dropped packets
Context	debug service vpls <i>service-name</i> igmp-snooping packet dropped <i>boolean</i>
Tree	dropped
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress boolean

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls <i>service-name</i> igmp-snooping packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-mpls boolean

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	debug service vpls <i>service-name</i> igmp-snooping packet evpn-mpls <i>boolean</i>
Tree	evpn-mpls
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ingress *boolean*

Synopsis Enable tracing for received packets
 Context [debug service vpls service-name igmp-snooping packet ingress](#) *boolean*
 Tree [ingress](#)
 Default true
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

mac [[mac-address](#)] *mac-address*

Synopsis Add a list entry for **mac**
 Context [debug service vpls service-name igmp-snooping packet mac](#) *mac-address*
 Tree [mac](#)
 Max. instances 8
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[mac-address] *mac-address*

Synopsis MAC address
 Context [debug service vpls service-name igmp-snooping packet mac](#) *mac-address*
 Tree [mac](#)
 String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis Add a list entry for **sap**
 Context [debug service vpls service-name igmp-snooping packet sap](#) *sap*

Tree	sap
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] sap

Synopsis	SAP ID
Context	debug service vpls service-name igmp-snooping packet sap sap
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-bind [[sdp-bind-id](#)] sdp-bind-id

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls service-name igmp-snooping packet sdp-bind sdp-bind-id
Tree	sdp-bind
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] sdp-bind-id

Synopsis	SDP bind ID
Context	debug service vpls service-name igmp-snooping packet sdp-bind sdp-bind-id
Tree	sdp-bind
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mld-snooping

Synopsis Enter the **mld-snooping** context

Context [debug service vpls service-name mld-snooping](#)

Tree [mld-snooping](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

packet

Synopsis Enable the **packet** context

Context [debug service vpls service-name mld-snooping packet](#)

Tree [packet](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail *keyword*

Synopsis Detail level of the debug output

Context [debug service vpls service-name mld-snooping packet detail keyword](#)

Tree [detail](#)

Options low, medium, high

Default medium

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dropped *boolean*

Synopsis Enable tracing for dropped packets

Context [debug service vpls service-name mld-snooping packet dropped boolean](#)

Tree [dropped](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

egress *boolean*

Synopsis Enable tracing for transmitted packets
Context [debug service vpls](#) *service-name* [mld-snooping packet egress](#) *boolean*
Tree [egress](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

evpn-mpls *boolean*

Synopsis Allow debugging for EVPN-MPLS destinations
Context [debug service vpls](#) *service-name* [mld-snooping packet evpn-mpls](#) *boolean*
Tree [evpn-mpls](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ingress *boolean*

Synopsis Enable tracing for received packets
Context [debug service vpls](#) *service-name* [mld-snooping packet ingress](#) *boolean*
Tree [ingress](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mac [[mac-address](#)] *mac-address*

Synopsis Add a list entry for **mac**
Context [debug service vpls](#) *service-name* [mld-snooping packet mac](#) *mac-address*
Tree [mac](#)

Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mac-address] mac-address

Synopsis	MAC address
Context	debug service vpls <i>service-name</i> mld-snooping packet mac <i>mac-address</i>
Tree	mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] sap

Synopsis	Add a list entry for sap
Context	debug service vpls <i>service-name</i> mld-snooping packet sap <i>sap</i>
Tree	sap
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] sap

Synopsis	SAP ID
Context	debug service vpls <i>service-name</i> mld-snooping packet sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-bind [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls service-name mld-snooping packet sdp-bind sdp-bind-id
Tree	sdp-bind
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis	SDP bind ID
Context	debug service vpls service-name mld-snooping packet sdp-bind sdp-bind-id
Tree	sdp-bind
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim-snooping

Synopsis	Enter the pim-snooping context
Context	debug service vpls service-name pim-snooping
Tree	pim-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

events

Synopsis	Enable the events context
Context	debug service vpls service-name pim-snooping events
Tree	events
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

adjacency

Synopsis Enable the **adjacency** context

Context `debug service vpls service-name pim-snooping events adjacency`

Tree `adjacency`

Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Enable the **all** context

Context `debug service vpls service-name pim-snooping events all`

Tree `all`

Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

detail *boolean*

Synopsis Enable detail tracing

Context `debug service vpls service-name pim-snooping events all detail boolean`

Tree `detail`

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis IP multicast group address used to trace events

Context `debug service vpls service-name pim-snooping events all group-address (ipv4-address-no-zone | ipv6-address-no-zone)`

Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug service vpls service-name pim-snooping events all source-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

db

Synopsis	Enable the db context
Context	debug service vpls service-name pim-snooping events db
Tree	db
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls service-name pim-snooping events db detail <i>boolean</i>
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
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Context	<code>debug service vpls service-name pim-snooping events db group-address</code> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	<code>debug service vpls service-name pim-snooping events db source-address</code> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

jp

Synopsis	Enable the jp context
Context	<code>debug service vpls service-name pim-snooping events jp</code>
Tree	<code>jp</code>
Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug service vpls service-name pim-snooping events jp detail</code> <i>boolean</i>
Tree	<code>detail</code>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP multicast group address used to trace events
Context	debug service vpls service-name pim-snooping events jp group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address used to trace events
Context	debug service vpls service-name pim-snooping events jp source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcs

Synopsis	Enable the mcs context
Context	debug service vpls service-name pim-snooping events mcs
Tree	mcs
Description	Commands in this context enable debugging for PIM snooping multi-chassis synchronization.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls service-name pim-snooping events mcs detail boolean
Tree	detail
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port

Synopsis	Enable the port context
Context	debug service vpls service-name pim-snooping events port
Tree	port
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls service-name pim-snooping events port detail boolean
Tree	detail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls service-name pim-snooping events port evpn-mpls
Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id *sap*

Synopsis	SAP ID
Context	debug service vpls service-name pim-snooping events port sap-id sap

Tree	sap-id
String length	1 to 45
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-bind-id *sdp-bind-id*

Synopsis	SDP bind ID
Context	debug service vpls service-name pim-snooping events port sdp-bind-id sdp-bind-id
Tree	sdp-bind-id
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

red

Synopsis	Enable the red context
Context	debug service vpls service-name pim-snooping events red
Tree	red
Description	Commands in this context enable debugging for PIM messages sent to the standby CPM.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls service-name pim-snooping events red detail boolean
Tree	detail

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet

Synopsis	Enable the packet context
Context	debug service vpls service-name pim-snooping packet
Tree	packet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-origins

Synopsis	Allow tracing on all ports
Context	debug service vpls service-name pim-snooping packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	debug service vpls service-name pim-snooping packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-types

Synopsis	Enter the packet-types context
Context	debug service vpls service-name pim-snooping packet packet-types
Tree	packet-types

Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello *boolean*

Synopsis	Debug Hello packets
Context	debug service vpls <i>service-name</i> pim-snooping packet packet-types hello <i>boolean</i>
Tree	hello
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

jp *boolean*

Synopsis	Debug join and prune packets
Context	debug service vpls <i>service-name</i> pim-snooping packet packet-types jp <i>boolean</i>
Tree	jp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port

Synopsis	Enable the port context
Context	debug service vpls <i>service-name</i> pim-snooping packet port
Tree	port
Notes	The following elements are part of a choice: all-origins or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls <i>service-name</i> pim-snooping packet port evpn-mpls

Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id *sap*

Synopsis	SAP ID
Context	debug service vpls <i>service-name</i> pim-snooping packet port sap-id <i>sap</i>
Tree	sap-id
String length	1 to 45
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-bind-id *sdp-bind-id*

Synopsis	SDP bind ID
Context	debug service vpls <i>service-name</i> pim-snooping packet port sdp-bind-id <i>sdp-bind-id</i>
Tree	sdp-bind-id
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-arp

Synopsis	Enter the proxy-arp context
Context	debug service vpls <i>service-name</i> proxy-arp
Tree	proxy-arp
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

all

Synopsis Debug the proxy ARP function for all addresses

Context [debug service vpls service-name proxy-arp all](#)

Tree [all](#)

Notes The following elements are part of a choice: **all**, **ip**, or **mac**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip

Synopsis Enter the **ip** context

Context [debug service vpls service-name proxy-arp ip](#)

Tree [ip](#)

Notes The following elements are part of a choice: **all**, **ip**, or **mac**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address [[ipv4-address](#)] *ipv4-unicast-address*

Synopsis Add a list entry for **address**

Context [debug service vpls service-name proxy-arp ip address ipv4-unicast-address](#)

Tree [address](#)

Max. instances 256

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[[ipv4-address](#)] *ipv4-unicast-address*

Synopsis IPv4 address of the proxy ARP session to debug

Context [debug service vpls service-name proxy-arp ip address ipv4-unicast-address](#)

Tree [address](#)

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Enter the mac context
Context	debug service vpls service-name proxy-arp mac
Tree	mac
Notes	The following elements are part of a choice: all , ip , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[address](#)] *mac-address*

Synopsis	Add a list entry for address
Context	debug service vpls service-name proxy-arp mac address mac-address
Tree	address
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**address**] *mac-address*

Synopsis	MAC address of the proxy ARP session to debug
Context	debug service vpls service-name proxy-arp mac address mac-address
Tree	address
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-nd

Synopsis	Enter the proxy-nd context
Context	debug service vpls service-name proxy-nd
Tree	proxy-nd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Debug the proxy ND function for all addresses
Context	debug service vpls service-name proxy-nd all
Tree	all
Notes	The following elements are part of a choice: all , ip , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Enter the ip context
Context	debug service vpls service-name proxy-nd ip
Tree	ip
Notes	The following elements are part of a choice: all , ip , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[ipv6-address](#)] *ipv6-address*

Synopsis	Add a list entry for address
Context	debug service vpls service-name proxy-nd ip address ipv6-address
Tree	address
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis	IPv6 address of the proxy ND session to debug
Context	debug service vpls <i>service-name</i> proxy-nd ip address <i>ipv6-address</i>
Tree	address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Enter the mac context
Context	debug service vpls <i>service-name</i> proxy-nd mac
Tree	mac
Notes	The following elements are part of a choice: all , ip , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[address](#)] *mac-address*

Synopsis	Add a list entry for address
Context	debug service vpls <i>service-name</i> proxy-nd mac address <i>mac-address</i>
Tree	address
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[address](#)] *mac-address*

Synopsis	MAC address of the proxy ND session to debug
Context	debug service vpls <i>service-name</i> proxy-nd mac address <i>mac-address</i>
Tree	address
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp

Synopsis	Enter the stp context
Context	debug service vpls service-name stp
Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

events

Synopsis	Enable the events context
Context	debug service vpls service-name stp events
Tree	events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-events

Synopsis	Trace all STP events
Context	debug service vpls service-name stp events all-events
Tree	all-events
Notes	The following elements are part of a choice: all-events or event-types .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-types

Synopsis	Enter the event-types context
Context	debug service vpls service-name stp events event-types
Tree	event-types
Notes	The following elements are part of a choice: all-events or event-types .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bpdu *boolean*

Synopsis Trace received and transmitted BPDUs

Context [debug service vpls service-name stp events event-types bpdu boolean](#)

Tree [bpdu](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

core-connectivity *boolean*

Synopsis Trace STO core connectivity events

Context [debug service vpls service-name stp events event-types core-connectivity boolean](#)

Tree [core-connectivity](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

exception *boolean*

Synopsis Trace STP exception events

Context [debug service vpls service-name stp events event-types exception boolean](#)

Tree [exception](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fsm-state-changes *boolean*

Synopsis Trace STP FSM state change events

Context [debug service vpls service-name stp events event-types fsm-state-changes boolean](#)

Tree [fsm-state-changes](#)

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

fsm-timers *boolean*

Synopsis Trace STP FSM timer events
Context [debug service vpls service-name stp events event-types fsm-timers boolean](#)
Tree [fsm-timers](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-role *boolean*

Synopsis Trace STP port role events
Context [debug service vpls service-name stp events event-types port-role boolean](#)
Tree [port-role](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-state *boolean*

Synopsis Trace STP port state events
Context [debug service vpls service-name stp events event-types port-state boolean](#)
Tree [port-state](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sap [[sap-id](#)] **sap**

Synopsis Add a list entry for **sap**
Context [debug service vpls service-name stp sap sap](#)
Tree [sap](#)

Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] sap

Synopsis	SAP ID
Context	debug service vpls <i>service-name</i> stp sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-bind [sdp-bind-id] sdp-bind-id

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls <i>service-name</i> stp sdp-bind <i>sdp-bind-id</i>
Tree	sdp-bind
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] sdp-bind-id

Synopsis	SDP bind ID
Context	debug service vpls <i>service-name</i> stp sdp-bind <i>sdp-bind-id</i>
Tree	sdp-bind
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	debug subscriber-mgmt
Tree	subscriber-mgmt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-user-db [[name](#)] *named-item*

Synopsis	Enter the local-user-db list instance
Context	debug subscriber-mgmt local-user-db <i>named-item</i>
Tree	local-user-db
Max. instances	127
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[name\]](#) *named-item*

Synopsis	Local user database name
Context	debug subscriber-mgmt local-user-db <i>named-item</i>
Tree	local-user-db
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Level of the local user database debug output
Context	debug subscriber-mgmt local-user-db <i>named-item</i> mode <i>keyword</i>
Tree	mode
Options	all – Display all lookup events failed – Display failed lookup events

Default	failed
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
Context	debug system
Tree	system
Description	Commands in this context enable debugging of general system level functions and router management protocols.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc

Synopsis	Enter the grpc context
Context	debug system grpc
Tree	grpc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client

Synopsis	Enter the client context
Context	debug system grpc client
Tree	client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Set debugging for all clients
Context	debug system grpc client all
Tree	all

Notes	The following elements are part of a choice: all or ip-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address for debugging
Context	debug system grpc client ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: all or ip-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	RPCs or service types to debug
Context	debug system grpc type <i>keyword</i>
Tree	type
Options	gnmi-capabilities, gnmi-get, gnmi-set, gnmi-subscribe, rib-api-modify, rib-api-getversion, gnoi-cert-mgmt-rpcs, gnoi-file-rpcs, gnoi-system-rpcs, custom-proto-rpcs
Max. instances	12
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc-tunnel

Synopsis	Enter the grpc-tunnel context
Context	debug system grpc-tunnel
Tree	grpc-tunnel
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel

Synopsis	Enter the tunnel context
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Context	debug system grpc-tunnel tunnel
Tree	tunnel
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Set debug output for all tunnels
Context	debug system grpc-tunnel tunnel all
Tree	all
Notes	The following elements are part of a choice: all or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *named-item*

Synopsis	Name of the tunnel to restrict the debug output
Context	debug system grpc-tunnel tunnel name <i>named-item</i>
Tree	name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: all or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-interface

Synopsis	Enter the management-interface context
Context	debug system management-interface
Tree	management-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf keyword

Synopsis	Debugging verbosity for NETCONF
Context	debug system management-interface netconf <i>keyword</i>
Tree	netconf
Options	error – Error messages warning – Warning and error messages info – All messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp keyword

Synopsis	Debugging verbosity for SNMP
Context	debug system management-interface snmp <i>keyword</i>
Tree	snmp
Options	error – Error messages warning – Warning and error messages info – All messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

persistence

Synopsis	Enable the persistence context
Context	debug system persistence
Tree	persistence
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

all

Synopsis	Persistence debugging for all applications
Context	debug system persistence all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (ancp , application-assurance , dhcp-server , nat-fwds , python-policy-cache , and submgt).

Introduced	26.7.R1
Platforms	7705 SAR Gen 2

ancp

Synopsis	Persistence debugging for ANCP protocol
Context	debug system persistence ancp
Tree	ancp
Notes	The following elements are part of a mandatory choice: all or (ancp , application-assurance , dhcp-server , nat-fwds , python-policy-cache , and submgt).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

dhcp-server

Synopsis	Persistence debugging for DHCP and DHCPv6 servers
Context	debug system persistence dhcp-server
Tree	dhcp-server
Notes	The following elements are part of a mandatory choice: all or (ancp , application-assurance , dhcp-server , nat-fwds , python-policy-cache , and submgt).
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

nat-fwds

Synopsis	Persistence debugging for NAT port forwarding
Context	debug system persistence nat-fwds
Tree	nat-fwds
Notes	The following elements are part of a mandatory choice: all or (ancp , application-assurance , dhcp-server , nat-fwds , python-policy-cache , and submgt).
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

4.8 eth-cfm commands

```
configure
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- domain admin-name
- apply-groups reference
- apply-groups-exclude reference
- association admin-name
- apply-groups reference
- apply-groups-exclude reference
- auto-mep-discovery boolean
- bridge-identifier service-name
- apply-groups reference
- apply-groups-exclude reference
- ccm-interval keyword
- icc-based string
- integer number
- ma-index number
- remote-mep number
- apply-groups reference
- apply-groups-exclude reference
- string string
- vid number
- vpn-id string
- dns string
- format keyword
- level number
- mac string
- md-index number
- name string
```

4.8.1 eth-cfm command descriptions

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure eth-cfm
Tree	eth-cfm
Description	Commands in this context configure ETH-CFM parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain [**md-admin-name**] *admin-name*

Synopsis	Enter the domain list instance
Context	configure eth-cfm domain <i>admin-name</i>
Tree	domain
Description	Commands in this context configure CFM domain command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**md-admin-name**] *admin-name*

Synopsis	Maintenance Domain (MD) name
Context	configure eth-cfm domain <i>admin-name</i>
Tree	domain
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

association [**ma-admin-name**] *admin-name*

Synopsis	Enter the association list instance
----------	--

Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i>
Tree	association
Description	Commands in this context configure the Maintenance Association (MA) for the domain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ma-admin-name] *admin-name*

Synopsis	Domain association name
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i>
Tree	association
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-mep-discovery *boolean*

Synopsis	Allow remote MEP automatic discovery
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> auto-mep-discovery <i>boolean</i>
Tree	auto-mep-discovery
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bridge-identifier [[bridge-name](#)] *service-name*

Synopsis	Enter the bridge-identifier list instance
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> bridge-identifier <i>service-name</i>
Tree	bridge-identifier
Description	Commands in this context configure the cross-reference required to link the CFM function with the service context. The link is created when the <i>bridge-id</i> , or <i>bridge-name</i> matches the <i>service-id</i> , or <i>service-name</i> , respectively.

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bridge-name] service-name

Synopsis	Bridge name that links to the service
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> bridge-identifier <i>service-name</i>
Tree	bridge-identifier
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-interval keyword

Synopsis	CCM transmission interval for all MEPs in association
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> ccm-interval <i>keyword</i>
Tree	ccm-interval
Options	300hz, 10ms, 100ms, 1s, 10s, 60s, 600s
Default	10s
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icc-based string



WARNING:

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

Synopsis	Maintenance Association name in ICC-based format
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> icc-based <i>string</i>
Tree	icc-based

String length	8 to 13
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

integer *number*



WARNING:

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

Synopsis	Maintenance Association name in integer format
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> integer <i>number</i>
Tree	integer
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-index *number*



WARNING:

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

Synopsis	Maintenance Association (MA) table index
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> ma-index <i>number</i>
Tree	ma-index
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-mep [**mep-id**] *number*

Synopsis	Enter the remote-mep list instance
----------	---

Context	configure <i>eth-cfm domain admin-name association admin-name remote-mep number</i>
Tree	<i>remote-mep</i>
Description	<p>Commands in this context configure the remote MEP ID. Optionally, the user can configure a unicast MAC address associated with the remote MEP. This unicast value replaces the default Layer 2 class 1 multicast address that is typically associated with ETH-CC packets.</p> <p>Note: This command is not supported with subsecond CCM intervals. The unicast address may only be configured when a single remote MEP exists in the association.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mep-id] *number*

Synopsis	Remote MEP ID
Context	configure <i>eth-cfm domain admin-name association admin-name remote-mep number</i>
Tree	<i>remote-mep</i>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*



WARNING:

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

Synopsis	Maintenance Association name in raw ASCII string format
Context	configure <i>eth-cfm domain admin-name association admin-name string string</i>
Tree	<i>string</i>
String length	1 to 45
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vid number

	WARNING: Modifying this element recreates the parent element automatically for the new value to take effect.
Synopsis	Primary VLAN ID for the Maintenance Association name
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> vid <i>number</i>
Tree	vid
Range	0 to 4094
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-id string

	WARNING: Modifying this element recreates the parent element automatically for the new value to take effect.
Synopsis	VPN ID for the Maintenance Association name
Context	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i> vpn-id <i>string</i>
Tree	vpn-id
String length	0 to 15
String format	'vpn-id' must be 6 uppercase hex digits, colon, 8 uppercase hex digits for OUI and VPN index (e.g. AABBC:11223344)
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns string

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

Synopsis	Domain name like text string derived from a DNS name
Context	configure <i>eth-cfm domain admin-name dns string</i>
Tree	<i>dns</i>
String length	1 to 43
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format *keyword*

**WARNING:**

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

Synopsis	Maintenance domain name format type
Context	configure <i>eth-cfm domain admin-name format keyword</i>
Tree	<i>format</i>
Options	none
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

**WARNING:**

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

Synopsis	Maintenance Domain Level (MD Level)
Context	configure <i>eth-cfm domain admin-name level number</i>
Tree	<i>level</i>
Range	0 to 7
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac string

**WARNING:**

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

Synopsis	Maintenance domain MAC name
Context	configure eth-cfm domain <i>admin-name</i> mac string
Tree	mac
String length	13 to 23
String format	'mac' must be colon-separated hex MAC, a hyphen, then decimal 0-65535 for the 2-octet suffix (e.g. 00:11:22:33:44:55-4095)
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-index number

**WARNING:**

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

Synopsis	The index of the Maintenance Domain (MD)
Context	configure eth-cfm domain <i>admin-name</i> md-index number
Tree	md-index
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name string

**WARNING:**

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

Synopsis	Maintenance Domain name
Context	configure eth-cfm domain <i>admin-name</i> name string
Tree	name

String length	1 to 43
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.9 filter commands

```

configure
- filter
  - apply-groups reference
  - apply-groups-exclude reference
  - dhcp-filter number
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - drop
    - description description
    - entry number
      - action
        - drop
      - apply-groups reference
      - apply-groups-exclude reference
      - option
        - absent
        - match
          - exact boolean
          - hex string
          - invert boolean
          - string string
        - number number
        - present
      - option
    - dhcp6-filter number
      - apply-groups reference
      - apply-groups-exclude reference
      - default-action
        - drop
      - description description
      - entry number
        - action
          - drop
        - apply-groups reference
        - apply-groups-exclude reference
        - option
          - absent
          - match
            - exact boolean
            - hex string
            - invert boolean
            - string string
          - number number
          - present
        - option
      - ip-exception filter-name
        - apply-groups reference
        - apply-groups-exclude reference
        - description description
        - entry number
          - apply-groups reference
          - apply-groups-exclude reference
          - description description
          - match
            - dst-ip
              - address (ipv4-prefix-with-host-bits | ipv4-address)
              - mask ipv4-address
            - dst-port
              - eq number
              - gt number

```

configure filter ip-exception entry match dst-port lt

```

    - lt number
    - range
      - end number
      - start number
    - icmp
      - code number
      - type number
    - protocol (number | keyword)
    - src-ip
      - address (ipv4-prefix-with-host-bits | ipv4-address)
      - mask ipv4-address
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
  - filter-id number
- ip-filter filter-name
  - apply-groups reference
  - apply-groups-exclude reference
  - chain-to-system-filter boolean
  - default-action keyword
  - description description
  - embed
    - filter reference offset number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - entry number
    - action
      - accept
      - apply-groups reference
      - apply-groups-exclude reference
      - drop
      - drop-when
        - extracted-traffic
        - packet-length
          - eq number
          - gt number
          - lt number
          - range
            - end number
            - start number
        - ttl
          - eq number
          - gt number
          - lt number
          - range
            - end number
            - start number
      - forward
        - next-hop
          - nh-ip
            - address ipv4-address
            - indirect boolean
          - nh-ip-vrf
            - address ipv4-address
            - indirect boolean
            - router-instance string
        - redirect-policy reference
        - router-instance string
    - ignore-match

```

configure filter ip-filter entry action nat

```

- nat
- nat-policy reference
- rate-limit
- packet-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pir (number | keyword)
- policer named-item
- ttl
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- reassemble
- secondary
  - apply-groups reference
  - apply-groups-exclude reference
  - forward
    - next-hop
      - nh-ip-vrf
        - address ipv4-address
        - indirect boolean
        - router-instance string
- tcp-mss-adjust
- apply-groups reference
- apply-groups-exclude reference
- description description
- egress-pbr keyword
- log reference
- match
  - dscp keyword
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask ipv4-address
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
- icmp
  - code number
  - type number
- ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)
  - ip-prefix-list reference
  - mask ipv4-address
- ip-option
  - mask number
  - type number
- multiple-option boolean
- option-present boolean
- port
  - eq number

```

configure filter ip-filter entry match port gt

```

    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
    - protocol (number | keyword)
    - protocol-list reference
    - src-ip
      - address (ipv4-prefix-with-host-bits | ipv4-address)
      - ip-prefix-list reference
      - mask ipv4-address
    - src-port
      - eq number
      - gt number
      - lt number
      - port-list reference
      - range
        - end number
        - start number
    - src-route-option boolean
    - tcp-established
    - tcp-flags
      - ack boolean
      - cwr boolean
      - ece boolean
      - fin boolean
      - ns boolean
      - psh boolean
      - rst boolean
      - syn boolean
      - urg boolean
    - pbr-down-action-override keyword
    - sticky-dest (number | keyword)
    - filter-id number
    - scope keyword
  - ipv6-exception filter-name
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
    - match
      - dst-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - ipv6-prefix-list reference
        - mask ipv6-address
      - dst-port
        - eq number
        - gt number
        - lt number
        - port-list reference
        - range
          - end number
          - start number
      - icmp
        - code number
        - type number
    - next-header (number | keyword)
    - port
      - eq number
      - gt number

```

configure filter ipv6-exception entry match port lt

```

    - lt number
    - port-list reference
    - range
      - end number
      - start number
    - src-ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)
      - ipv6-prefix-list reference
      - mask ipv6-address
    - src-port
      - eq number
      - gt number
      - lt number
      - port-list reference
      - range
        - end number
        - start number
    - filter-id number
  - ipv6-filter filter-name
    - apply-groups reference
    - apply-groups-exclude reference
    - chain-to-system-filter boolean
    - default-action keyword
    - description description
    - embed
      - filter reference offset number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - entry number
      - action
        - accept
        - apply-groups reference
        - apply-groups-exclude reference
        - drop
        - drop-when
          - extracted-traffic
          - hop-limit
            - eq number
            - gt number
            - lt number
            - range
              - end number
              - start number
          - payload-length
            - eq number
            - gt number
            - lt number
            - range
              - end number
              - start number
        - forward
          - next-hop
          - nh-ip
            - address ipv6-address
            - indirect boolean
          - nh-ip-vrf
            - address ipv6-address
            - indirect boolean
            - router-instance string
          - redirect-policy reference
          - router-instance string
        - ignore-match
        - rate-limit

```


configure filter ipv6-filter entry action rate-limit hop-limit

```

- hop-limit
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- payload-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pir (number | keyword)
- policer named-item
- secondary
  - apply-groups reference
  - apply-groups-exclude reference
  - forward
    - next-hop
      - nh-ip-vrf
        - address ipv6-address
        - indirect boolean
        - router-instance string
- tcp-mss-adjust
- apply-groups reference
- apply-groups-exclude reference
- description description
- egress-pbr keyword
- log reference
- match
  - dscp keyword
  - dst-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask ipv6-address
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - extension-header
    - ah boolean
    - esp boolean
    - hop-by-hop boolean
    - routing-type0 boolean
  - flow-label
    - mask number
    - value number
  - fragment keyword
- icmp
  - code number
  - type number
- ip
  - address (ipv6-prefix-with-host-bits | ipv6-address)
  - ipv6-prefix-list reference
  - mask ipv6-address
  - next-header (number | keyword)
  - next-header-list reference
  - port

```

configure filter ipv6-filter entry match port eq

- **eq** *number*
- **gt** *number*
- **lt** *number*
- **port-list** *reference*
- **range**
 - **end** *number*
 - **start** *number*
- **src-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *ipv6-address*
- **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **tcp-established**
- **tcp-flags**
 - **ack** *boolean*
 - **cwr** *boolean*
 - **ece** *boolean*
 - **fin** *boolean*
 - **ns** *boolean*
 - **psh** *boolean*
 - **rst** *boolean*
 - **syn** *boolean*
 - **urg** *boolean*
- **pbr-down-action-override** *keyword*
- **sticky-dest** (*number* | *keyword*)
- **filter-id** *number*
- **scope** *keyword*
- **log** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description-or-empty*
 - **destination**
 - **memory**
 - **max-entries** *number*
 - **stop-on-full** *boolean*
 - **syslog**
 - **name** *reference*
 - **summary**
 - **admin-state** *keyword*
 - **summary-crit** *keyword*
- **match-list**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-prefix-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **apply-path**
 - **bgp-peers** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *regular-expression-not-all-spaces*
 - **neighbor** *regular-expression-not-all-spaces*
 - **router-instance** *string*
 - **service-name-match** *regular-expression-not-all-spaces*
 - **interfaces** *number*
 - **apply-groups** *reference*

configure filter match-list ip-prefix-list apply-path interfaces apply-groups-exclude

- **apply-groups-exclude** *reference*
 - **interface** *regular-expression-not-all-spaces*
 - **router-instance** *string*
 - **service-name-match** *regular-expression-not-all-spaces*
- **description** *description*
- **prefix** *ipv4-prefix*
- **prefix-exclude** *ipv4-prefix*
- **ipv6-prefix-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **apply-path**
 - **bgp-peers** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *regular-expression-not-all-spaces*
 - **neighbor** *regular-expression-not-all-spaces*
 - **router-instance** *string*
 - **service-name-match** *regular-expression-not-all-spaces*
 - **interfaces** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface** *regular-expression-not-all-spaces*
 - **router-instance** *string*
 - **service-name-match** *regular-expression-not-all-spaces*
 - **description** *description*
 - **prefix** *ipv6-prefix*
 - **prefix-exclude** *ipv6-prefix*
- **port-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **port** *number*
 - **range** **start** *number* **end** *number*
- **protocol-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **protocol** *(number | keyword)*
- **md-auto-id**
 - **filter-id-range**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
- **policer** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **mbs** *(number | keyword)*
 - **pir** *number*
 - **scope** *keyword*
- **redirect-policy** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **destination** *(ipv4-address-no-zone | ipv6-address-no-zone)*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **ping-test**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure filter redirect-policy destination ping-test drop-count

- **drop-count** *number*
 - **hold-down** *number*
 - **interval** *number*
 - **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **timeout** *number*
- **priority** *number*
- **unicast-rt-test**
- **notify-dest-change** *boolean*
- **router-instance** *string*
- **sticky-dest** (*number* | *keyword*)
- **redirect-policy-binding** *named-item*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **binding-operator** *keyword*
- **redirect-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination** *reference*
- **system-filter**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip** *reference*
 - **ipv6** *reference*

4.9.1 filter command descriptions

filter

Synopsis	Enter the filter context
Context	configure filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-filter [[filter-id](#)] *number*

Synopsis	Enter the dhcp-filter list instance
Context	configure filter dhcp-filter <i>number</i>
Tree	dhcp-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[filter-id\]](#) *number*

Synopsis	DHCP filter policy ID
Context	configure filter dhcp-filter <i>number</i>
Tree	dhcp-filter
Description	This command specifies the DHCP filter policy ID expressed as a decimal integer.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action

Synopsis	Enable the default-action context
Context	configure filter dhcp-filter <i>number</i> default-action
Tree	default-action

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop

Synopsis	DHCP host creation when the filter entry is matched
Context	configure filter dhcp-filter <i>number</i> default-action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter dhcp-filter <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i>
Tree	entry
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[entry-id](#)] *number*

Synopsis	DHCP filter entry ID
----------	----------------------

Context	configure filter dhcp-filter <i>number</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enable the action context
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop

Synopsis	DHCP host creation when the filter entry is matched
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option

Synopsis	Enable the option context
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absent

Synopsis	Require the absence of related option
----------	---------------------------------------

Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enable the match context
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option match
Tree	match
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option match exact <i>boolean</i>
Tree	exact
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex *string*

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option match hex <i>string</i>
Tree	hex
String length	1 to 256
String format	'hex' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	configure <i>filter dhcp-filter number entry number option match invert boolean</i>
Tree	<i>invert</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	Matching pattern for the filtered option
Context	configure <i>filter dhcp-filter number entry number option match string string</i>
Tree	<i>string</i>
String length	1 to 127
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	configure <i>filter dhcp-filter number entry number option number number</i>
Tree	<i>number</i>
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

present

Synopsis	Require the presence of related option
Context	configure <i>filter dhcp-filter number entry number option present</i>
Tree	<i>present</i>
Notes	The following elements are part of a mandatory choice: absent , match , or present .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6-filter *[filter-id] number*

Synopsis	Enter the dhcp6-filter list instance
Context	configure <i>filter dhcp6-filter number</i>
Tree	<i>dhcp6-filter</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-id] number

Synopsis	DHCP filter policy ID
Context	configure <i>filter dhcp6-filter number</i>
Tree	<i>dhcp6-filter</i>
Description	This command specifies the DHCP filter policy ID expressed as a decimal integer.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action

Synopsis	Enable the default-action context
Context	configure <i>filter dhcp6-filter number default-action</i>
Tree	<i>default-action</i>
Description	Commands in this context enable the default action for DHCP6 filters when no entries match.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop

Synopsis	Drop DHCPv6 message (do not process)
----------	--------------------------------------

Context	configure filter dhcp6-filter <i>number</i> default-action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-authentication , bypass-host-creation , or drop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter dhcp6-filter <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i>
Tree	entry
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	DHCP filter entry ID
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

action

Synopsis Enable the **action** context

Context **configure filter dhcp6-filter number entry number action**

Tree **action**

Description Commands in this context enable the action to take on DHCP6 host creation when the filter entry matches.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

drop

Synopsis Drop DHCPv6 message (do not process)

Context **configure filter dhcp6-filter number entry number action drop**

Tree **drop**

Notes The following elements are part of a mandatory choice: **bypass-host-authentication**, **bypass-host-creation**, or **drop**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

option

Synopsis Enable the **option** context

Context **configure filter dhcp6-filter number entry number option**

Tree **option**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

absent

Synopsis Require the absence of related option

Context **configure filter dhcp6-filter number entry number option absent**

Tree **absent**

Notes The following elements are part of a mandatory choice: **absent**, **match**, or **present**.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enable the match context
Context	configure filter dhcp6-filter number entry number option match
Tree	match
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	configure filter dhcp6-filter number entry number option match exact <i>boolean</i>
Tree	exact
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex *string*

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp6-filter number entry number option match hex <i>string</i>
Tree	hex
String length	1 to 256
String format	'hex' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

invert *boolean*

Synopsis	Invert (partial) matching criteria
----------	------------------------------------

Context	configure <i>filter dhcp6-filter number entry number option match invert boolean</i>
Tree	<i>invert</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	Matching pattern for the filtered option
Context	configure <i>filter dhcp6-filter number entry number option match string string</i>
Tree	<i>string</i>
String length	1 to 127
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	configure <i>filter dhcp6-filter number entry number option number number</i>
Tree	<i>number</i>
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

present

Synopsis	Require the presence of related option
Context	configure <i>filter dhcp6-filter number entry number option present</i>
Tree	<i>present</i>
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-exception [*filter-name*] *filter-name*

Synopsis	Enter the ip-exception list instance
Context	configure filter ip-exception <i>filter-name</i>
Tree	ip-exception
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *filter-name*

Synopsis	Filter name
Context	configure filter ip-exception <i>filter-name</i>
Tree	ip-exception
String length	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter ip-exception <i>filter-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IP address to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	Mask applied as an AND to the IP address
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact match criterion
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than match criterion for the port
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match icmp
Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

code number

Synopsis	ICMP code value to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match icmp code <i>number</i>
Tree	code
Description	This command specifies the ICMP code value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.

An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP code value of 0 match criterion may match non initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.

Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *number*

Synopsis	ICMP type value to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match icmp type <i>number</i>
Tree	type
Description	<p>This command specifies the ICMP type value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP type value of 0 match criterion may match non initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol (*number* | *keyword*)

Synopsis	IP protocol as the match criterion
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IP address to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	Mask applied as an AND to the IP address
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-port
Tree	src-port
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

eq *number*

Synopsis Exact match criterion

Context **configure** [filter ip-exception](#) *filter-name* [entry](#) *number* [match src-port](#) **eq** *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gt *number*

Synopsis Greater than match criterion for the port number

Context **configure** [filter ip-exception](#) *filter-name* [entry](#) *number* [match src-port](#) **gt** *number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Less than match criterion for the port

Context **configure** [filter ip-exception](#) *filter-name* [entry](#) *number* [match src-port](#) **lt** *number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enable the **range** context

Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the port range to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the port range to match
Context	configure filter ip-exception <i>filter-name</i> entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter-id *number*



WARNING:

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

Synopsis	Filter ID
Context	configure filter ip-exception <i>filter-name</i> filter-id <i>number</i>
Tree	filter-id

Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-filter *[filter-name] filter-name*

Synopsis	Enter the ip-filter list instance
Context	configure <i>filter ip-filter filter-name</i>
Tree	<i>ip-filter</i>
Description	Commands in this context create a configuration context for the specified IPv4 filter policy.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *filter-name*

Synopsis	Filter name
Context	configure <i>filter ip-filter filter-name</i>
Tree	<i>ip-filter</i>
String length	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chain-to-system-filter *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	configure <i>filter ip-filter filter-name chain-to-system-filter boolean</i>
Tree	<i>chain-to-system-filter</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	configure filter ip-filter <i>filter-name</i> default-action <i>keyword</i>
Tree	default-action
Options	drop, accept
Default	drop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter ip-filter <i>filter-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

embed

Synopsis	Enter the embed context
Context	configure filter ip-filter <i>filter-name</i> embed
Tree	embed
Description	Commands in this context configure filter policy embedding. A previously defined IPv4 embedded filter policy or Hybrid OpenFlow switch instance can be embedded into an exclusive, template, or system filter policy at the specified offset value. Rules derived from BGP FlowSpec can also be embedded into template filter policies only.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter [*name*] *reference offset number*

Synopsis	Enter the filter list instance
----------	---------------------------------------

Context	configure filter ip-filter filter-name embed filter reference offset number
Tree	filter
Description	Commands in this context embed a previously defined IPv4 filter policy into the filter policy at the specified offset value.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] reference

Synopsis	IPv4 policy to be embedded in the filter
Context	configure filter ip-filter filter-name embed filter reference offset number
Tree	filter
Reference	configure filter ip-filter filter-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

offset number

Synopsis	Offset of the embedded filter policy
Context	configure filter ip-filter filter-name embed filter reference offset number
Tree	filter
Description	This command configures the offset of the embedded filter policy. The embedded filter entry X has an entry X + offset in the embedding filter.
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the embedded filter
Context	configure filter ip-filter filter-name embed filter reference offset number admin-state keyword
Tree	admin-state

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the entry list instance
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i>
Tree	entry
Description	<p>Commands in this context create or edit an IPv4, IPv6, MAC, IP exception filter, or IPv6 exception filter entry. Multiple entries can be created using unique entry ID numbers within the filter. Entries must be sequenced from most to least explicit.</p> <p>An entry may not have any match criteria defined (in which case everything matches) but must have at least the action command configured for it to be considered complete. Entries without the action command are considered incomplete and hence are rendered inactive.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enable the action context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action
Tree	action
Description	Commands in this context configure a primary (no option specified) or secondary (secondary command specified) action to be performed on packets matching this

filter entry. An ACL filter entry remains inactive (is not programmed in hardware) until a specific action is configured for that entry.

A primary action supports any filter entry action, a secondary action is used for redundancy and defines a redundant Layer 3 PBR action for an Layer 3 PBR primary action or a redundant Layer 2 PBF action for a Layer 2 PBF primary action.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

accept

Synopsis Accept regular routing to forward a matching packet
Context **configure** filter ip-filter filter-name entry number action accept
Tree accept
Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

drop

Synopsis Drop a packet matching this entry
Context **configure** filter ip-filter filter-name entry number action drop
Tree drop
Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

drop-when

Synopsis Enable the **drop-when** context
Context **configure** filter ip-filter filter-name entry number action drop-when
Tree drop-when
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

extracted-traffic

Synopsis	Drop traffic extracted to CPM
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when extracted-traffic
Tree	extracted-traffic
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-length

Synopsis	Enable the packet-length context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when packet-length
Tree	packet-length
Notes	The following elements are part of a choice: packet-length or ttd .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when packet-length eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than match criterion for the length
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when packet-length gt <i>number</i>
Tree	gt
Range	0 to 65534

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than match criterion for the length
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when packet-length lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the length range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when packet-length range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter <i>filter-name</i> entry number action drop-when packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl

Synopsis	Enable the ttl context
Context	configure filter ip-filter <i>filter-name</i> entry number action drop-when ttl
Tree	ttl
Notes	The following elements are part of a choice: packet-length or ttl .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Equal to condition match value
Context	configure filter ip-filter <i>filter-name</i> entry number action drop-when ttl eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than condition match value
Context	configure filter ip-filter <i>filter-name</i> entry number action drop-when ttl gt number
Tree	gt

Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than condition match value
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when ttl lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action drop-when ttl range end <i>number</i>
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

start number

Synopsis Lower bound of the range

Context **configure** filter ip-filter filter-name entry number action drop-when ttl range start number

Tree start

Range 0 to 254

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

forward

Synopsis Enter the **forward** context

Context **configure** filter ip-filter filter-name entry number action forward

Tree forward

Description Commands in this context set the context for specific forward commands to be performed.

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

next-hop

Synopsis Enable the **next-hop** context

Context **configure** filter ip-filter filter-name entry number action forward next-hop

Tree next-hop

Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **lsp-container**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nh-ip

Synopsis	Enable the nh-ip context
Context	configure filter ip-filter <i>filter-name</i> entry number action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: interface-name , nh-ip , or nh-ip-vrf .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-address*



WARNING:

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

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>filter-name</i> entry number action forward next-hop nh-ip address ipv4-address
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>filter-name</i> entry number action forward next-hop nh-ip indirect boolean
Tree	indirect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	The following elements are part of a mandatory choice: interface-name , nh-ip , or nh-ip-vrf .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-address*



WARNING:

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

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action forward next-hop nh-ip-vrf address <i>ipv4-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action forward next-hop nh-ip-vrf indirect <i>boolean</i>
Tree	indirect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string***WARNING:**

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

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-policy *reference***WARNING:**

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

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action forward redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>named-item</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , lsp-container , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , srv6-policy , or vprn-target .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string***WARNING:**

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

Synopsis	Router name or VPRN service name
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action forward router-instance <i>string</i>

Tree	router-instance
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , lsp-container , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , srv6-policy , or vprn-target .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-match

Synopsis	Ignore match criteria for the entry
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action ignore-match
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat

Synopsis	Enable the nat context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action nat
Tree	nat
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action nat nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>external-named-item</i>

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

rate-limit

Synopsis	Enable the rate-limit context
Context	configure filter ip-filter filter-name entry number action rate-limit
Tree	rate-limit
Description	Commands in this context configure the rate-limit action for traffic that matches this filter entry.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-length

Synopsis	Enable the packet-length context
Context	configure filter ip-filter filter-name entry number action rate-limit packet-length
Tree	packet-length
Notes	The following elements are part of a choice: packet-length or tll .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ip-filter filter-name entry number action rate-limit packet-length eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than match criterion for the length
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Context	configure <i>filter ip-filter filter-name entry number action rate-limit packet-length gt number</i>
Tree	<i>gt</i>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than match criterion for the length
Context	configure <i>filter ip-filter filter-name entry number action rate-limit packet-length lt number</i>
Tree	<i>lt</i>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure <i>filter ip-filter filter-name entry number action rate-limit packet-length range</i>
Tree	<i>range</i>
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the length range
Context	configure <i>filter ip-filter filter-name entry number action rate-limit packet-length range end number</i>
Tree	<i>end</i>
Range	1 to 65535
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action rate-limit packet-length range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (number | keyword)

Synopsis	Peak information rate
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action rate-limit pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: pir , policer , or pps-pir .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer named-item

Synopsis	Policer name to use for rate limiting traffic
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action rate-limit policer <i>named-item</i>
Tree	policer
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: pir , policer , or pps-pir .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

tth

Synopsis Enable the **tth** context

Context **configure** *filter ip-filter filter-name entry number action rate-limit tth*

Tree **tth**

Notes The following elements are part of a choice: **packet-length** or **tth**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

eq number

Synopsis Equal to condition match value

Context **configure** *filter ip-filter filter-name entry number action rate-limit tth eq number*

Tree **eq**

Range 0 to 255

Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gt number

Synopsis Greater than condition match value

Context **configure** *filter ip-filter filter-name entry number action rate-limit tth gt number*

Tree **gt**

Range 0 to 254

Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lt number

Synopsis Less than condition match value

Context **configure** *filter ip-filter filter-name entry number action rate-limit tth lt number*

Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action rate-limit ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action rate-limit ttl range end <i>number</i>
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action rate-limit ttl range start <i>number</i>
Tree	start
Range	0 to 254
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reassemble

Synopsis	Forward matching packets to reassembly function
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action reassemble
Tree	reassemble
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary

Synopsis	Enable the secondary context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary
Tree	secondary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward

Synopsis	Enter the forward context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop
Tree	next-hop

Notes	The following elements are part of a choice: next-hop , sap , sdp , or vpn-target .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-address*



WARNING:

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

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf address <i>ipv4-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf indirect <i>boolean</i>
Tree	indirect
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*



WARNING:

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

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms7705 SAR Gen 2

egress-pbr keyword



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

Synopsis	PBR that has an effect when this filter is applied on egress
Context	configure filter ip-filter filter-name entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log reference

Synopsis	Log that is used for packets matching this entry
Context	configure filter ip-filter filter-name entry number log reference
Tree	log
Reference	configure filter log number
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure filter ip-filter filter-name entry number match
Tree	match
Description	Commands in this context configure match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP used as an IP filter match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Description	Commands in this context configure a destination address range that is used by filter policy match criteria.
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (ipv4-prefix-with-host-bits | ipv4-address)

Synopsis	IPv4 address used as the match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IPv4 address mask used as the match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-port
Tree	dst-port
Description	Commands in this context configure match criteria for the destination port.
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Exact value as the match criterion
Context	configure filter ip-filter filter-name entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than value as the match criterion
Context	configure filter ip-filter filter-name entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than value as the match criterion
Context	configure filter ip-filter filter-name entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter filter-name entry number match dst-port port-list reference
Tree	port-list

Reference	configure filter match-list port-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Match criterion for fragmented packets
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match icmp
Tree	icmp
Description	Commands in this context configure ICMP values to use as IP filter match criteria.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

code number

Synopsis	ICMP code value to match
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match icmp code <i>number</i>
Tree	code
Description	<p>This command specifies the ICMP code value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP code value of 0 match criterion may match non initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type number

Synopsis	ICMP type value to match
Context	configure filter ip-filter filter-name entry number match icmp type number
Tree	type
Description	<p>This command specifies the ICMP type value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP type value of 0 match criterion may match non initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Enter the ip context
Context	configure filter ip-filter filter-name entry number match ip
Tree	ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (ipv4-prefix-with-host-bits | ipv4-address)

Synopsis	IPv4 address used as the match criterion
Context	configure filter ip-filter filter-name entry number match ip address (ipv4-prefix-with-host-bits ipv4-address)
Tree	address
String format	<p>'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32</p> <p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IPv4 address mask used as the match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-option

Synopsis	Enable the ip-option context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match ip-option
Tree	ip-option
Description	Commands in this context configure matching packets with a specific IP option, or a range of IP options, in the first option of the IP header as an IP filter match criterion.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	Mask used with the IP option value in the packet header
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Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match ip-option mask <i>number</i>
Tree	mask
Description	This command specifies an optional value that can be used when specifying a range of option numbers to use as the match criteria.
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *number*

Synopsis	IP option to match
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match ip-option type <i>number</i>
Tree	type
Description	<p>This command specifies the 8-bit option type in decimal integer, binary, or hexadecimal format. The mask is applied as an AND to the option byte, and the result is compared with the option value.</p> <p>The decimal value entered for the match should be a combined value of the 8-bit option type field and not only the option number. For example, to match IP packets that contain the Router Alert option (option number = 20), enter the option type of 148 (10010100).</p>
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiple-option *boolean*

Synopsis	Match based on presence of multiple options in header
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match multiple-option <i>boolean</i>
Tree	multiple-option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option-present *boolean*

Synopsis	Match on any IP option present in the packet
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Context	configure <i>filter ip-filter filter-name entry number match option-present boolean</i>
Tree	<i>option-present</i>
Description	When configured to true , the router matches on IP packets that contain any IP option in the IP header. An option field of zero is considered as no option present. When configured to false , the router matches on IP packets that do not have an IP option present in the IP header.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port

Synopsis	Enter the port context
Context	configure <i>filter ip-filter filter-name entry number match port</i>
Tree	<i>port</i>
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Exact value as the match criterion
Context	configure <i>filter ip-filter filter-name entry number match port eq number</i>
Tree	<i>eq</i>
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than value as the match criterion
Context	configure <i>filter ip-filter filter-name entry number match port gt number</i>
Tree	<i>gt</i>
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than value as the match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol (*number* | *keyword*)

Synopsis	IP protocol identifier as a match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: protocol or protocol-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-list *reference*

Synopsis	Name of the protocol list as a match criterion
Context	configure filter ip-filter filter-name entry number match protocol-list reference
Tree	protocol-list
Reference	configure filter match-list protocol-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: protocol or protocol-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ip-filter filter-name entry number match src-ip
Tree	src-ip
Description	Commands in this context configure a source address range that is used by filter policy match criteria.
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	configure filter ip-filter filter-name entry number match src-ip address (<i>ipv4-prefix-with-host-bits ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match src-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IPv4 address mask used as the match criterion
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match src-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure filter ip-filter <i>filter-name</i> entry <i>number</i> match src-port
Tree	src-port
Description	Commands in this context configure match criteria for the source port.
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Exact value as the match criterion
Context	configure filter ip-filter filter-name entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than value as the match criterion
Context	configure filter ip-filter filter-name entry number match src-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than value as the match criterion
Context	configure filter ip-filter filter-name entry number match src-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter filter-name entry number match src-port port-list reference
Tree	port-list

Reference	configure filter match-list port-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>filter-name</i> entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure filter ip-filter <i>filter-name</i> entry number match src-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure filter ip-filter <i>filter-name</i> entry number match src-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-route-option *boolean*

Synopsis	Match based on presence of source route option
Context	configure filter ip-filter filter-name entry number match src-route-option boolean
Tree	src-route-option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-established

Synopsis	Use ACK or RST status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-established
Tree	tcp-established
Description	When configured to true , a match occurs when the ACK or the RST TCP flag bit is set in the TCP header of an IP packet.
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure filter ip-filter filter-name entry number match tcp-flags
Tree	tcp-flags
Description	Commands in this context configure the use of TCP flags as the IP filter match.
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ack *boolean*

Synopsis	Use ACK TCP bit status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-flags ack boolean
Tree	ack

Description	<p>When configured to true, a match occurs when the ACK TCP flag bit, defined in RFC 793, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the ACK TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cwr boolean

Synopsis	Use CWR TCP bit status in TCP header as match criterion
Context	configure <i>filter ip-filter filter-name entry number match tcp-flags cwr boolean</i>
Tree	<i>cwr</i>
Description	<p>When configured to true, a match occurs when the Congestion Window Reduced (CWR) TCP flag bit, defined in RFC 3168, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the CWR TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ece boolean

Synopsis	Use ECE TCP bit status in TCP header as match criterion
Context	configure <i>filter ip-filter filter-name entry number match tcp-flags ece boolean</i>
Tree	<i>ece</i>
Description	<p>When configured to true, a match occurs when the ECN-Echo (ECE) TCP flag bit, defined in RFC 3168, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the ECE TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fin boolean

Synopsis	Use FIN TCP bit status in TCP header as match criterion
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Context	configure filter ip-filter filter-name entry number match tcp-flags fin boolean
Tree	fin
Description	<p>When configured to true, a match occurs when the FIN TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the FIN TCP flag bit, defined in RFC 793, is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ns boolean

Synopsis	Use NS TCP bit status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-flags ns boolean
Tree	ns
Description	<p>When configured to true, a match occurs when the Nonce Sum (NS) TCP flag bit, defined in RFC 3540, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the NS TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

psh boolean

Synopsis	Use PSH TCP bit status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-flags psh boolean
Tree	psh
Description	<p>When configured to true, a match occurs when the Push (PSH) TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the Push (PSH) TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rst boolean

Synopsis	Use RST TCP bit status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-flags rst boolean
Tree	rst
Description	<p>When configured to true, a match occurs when the RST TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the RST TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

syn boolean

Synopsis	Use SYN TCP bit status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-flags syn boolean
Tree	syn
Description	<p>When configured to true, a match occurs when the Synchronize (SYN) TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the SYN TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urg boolean

Synopsis	Use URG TCP bit status in TCP header as match criterion
Context	configure filter ip-filter filter-name entry number match tcp-flags urg boolean
Tree	urg
Description	<p>When configured to true, a match occurs when the Urgent (URG) TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the URG TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pbr-down-action-override *keyword*

Synopsis Action when PBR or PBF target for this entry is not available

Context **configure** [filter ip-filter filter-name entry number pbr-down-action-override keyword](#)

Tree [pbr-down-action-override](#)

Options drop, forward, filter-default-action

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sticky-dest (*number | keyword*)

Synopsis Time before action with available PBR or PBF destination and highest priority

Context **configure** [filter ip-filter filter-name entry number sticky-dest \(number | keyword\)](#)

Tree [sticky-dest](#)

Range 0 to 65535

Units seconds

Options no-hold-time-up

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter-id *number*



WARNING:

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

Synopsis IP filter ID

Context **configure** [filter ip-filter filter-name filter-id number](#)

Tree [filter-id](#)

Range 1 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

scope *keyword*

Synopsis	Scope of the filter definition
Context	configure filter ip-filter <i>filter-name</i> scope <i>keyword</i>
Tree	scope
Description	<p>This command configures the filter policy scope.</p> <p>If the scope of the policy is template and is applied to one or more services or network interfaces, the scope cannot be changed.</p>
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-exception [*filter-name*] *filter-name*

Synopsis	Enter the ipv6-exception list instance
Context	configure filter ipv6-exception <i>filter-name</i>
Tree	ipv6-exception
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[filter-name] *filter-name*

Synopsis	Filter name
Context	configure filter ipv6-exception <i>filter-name</i>
Tree	ipv6-exception
String length	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure filter ipv6-exception <i>filter-name</i> description <i>description</i>

Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

match

Synopsis	Enter the match context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mask *ipv6-address*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port
Tree	dst-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

eq *number*

Synopsis	Exact value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gt *number*

Synopsis	Greater than value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port gt <i>number</i>

Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lt number

Synopsis	Less than value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>named-item</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range

Synopsis	Enable the range context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis	Upper bound of the port range
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

start number

Synopsis	Lower bound of the port range
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp

Synopsis	Enter the icmp context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match icmp
Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

code number

Synopsis	ICMPv6 code value to match
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match icmp code <i>number</i>
Tree	code

Description	<p>This command specifies the ICMPv6 code value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP code value of 0 match criterion may match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

type *number*

Synopsis	ICMPv6 type value to match
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match icmp type <i>number</i>
Tree	type
Description	<p>This command specifies the ICMPv6 type value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP type value of 0 match criterion may match non initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port

Synopsis	Enter the port context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

eq *number*

Synopsis	Exact value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gt *number*

Synopsis	Greater than value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lt *number*

Synopsis	Less than value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port lt <i>number</i>
Tree	lt
Range	1 to 65535

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>named-item</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range

Synopsis	Enable the range context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end *number*

Synopsis	Upper bound of the port range
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

start number

Synopsis	Lower bound of the port range
Context	configure filter ipv6-exception <i>filter-name</i> entry number match port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ipv6-exception <i>filter-name</i> entry number match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry number match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry number match src-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list

Reference	configure filter match-list ipv6-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mask *ipv6-address*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

src-port

Synopsis	Enter the src-port context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-port
Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

eq *number*

Synopsis	Exact value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gt *number*

Synopsis	Greater than value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lt *number*

Synopsis	Less than value as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>named-item</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range

Synopsis	Enable the range context
Context	configure filter ipv6-exception <i>filter-name</i> entry <i>number</i> match src-port range

Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis	Upper bound of the port range
Context	configure filter ipv6-exception filter-name entry number match src-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

start number

Synopsis	Lower bound of the port range
Context	configure filter ipv6-exception filter-name entry number match src-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

filter-id number**WARNING:**

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

Synopsis	Filter ID
Context	configure filter ipv6-exception filter-name filter-id number
Tree	filter-id

Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-filter [[filter-name](#)] *filter-name*

Synopsis	Enter the ipv6-filter list instance
Context	configure filter ipv6-filter <i>filter-name</i>
Tree	ipv6-filter
Description	Commands in this context create a configuration context for the specified IPv6 filter entry.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *filter-name*

Synopsis	Filter name
Context	configure filter ipv6-filter <i>filter-name</i>
Tree	ipv6-filter
String length	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chain-to-system-filter *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	configure filter ipv6-filter <i>filter-name</i> chain-to-system-filter <i>boolean</i>
Tree	chain-to-system-filter
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	configure filter ipv6-filter <i>filter-name</i> default-action <i>keyword</i>
Tree	default-action
Options	drop, accept
Default	drop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter ipv6-filter <i>filter-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

embed

Synopsis	Enter the embed context
Context	configure filter ipv6-filter <i>filter-name</i> embed
Tree	embed
Description	Commands in this context configure filter policy embedding. A previously defined IPv6 embedded filter policy or Hybrid OpenFlow switch instance can be embedded into an exclusive, template, or system filter policy at the specified offset value. Rules derived from BGP FlowSpec can also be embedded into template filter policies only.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter [*name*] *reference offset number*

Synopsis	Enter the filter list instance
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Context	configure filter ipv6-filter filter-name embed filter reference offset number
Tree	filter
Description	Commands in this context embed a previously defined IPv6 filter policy into the filter policy at the specified offset value.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] reference

Synopsis	IPv6 policy to be embedded in the filter
Context	configure filter ipv6-filter filter-name embed filter reference offset number
Tree	filter
Reference	configure filter ipv6-filter filter-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

offset number

Synopsis	Offset of the embedded filter policy
Context	configure filter ipv6-filter filter-name embed filter reference offset number
Tree	filter
Description	This command configures the offset of the embedded filter policy. The embedded filter entry X has an entry X + offset in the embedding filter.
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the embedded filter
Context	configure filter ipv6-filter filter-name embed filter reference offset number admin-state keyword
Tree	admin-state

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i>
Tree	entry
Description	Commands in this context create or edit a configuration context for the specified IPv6 filter entry.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enable the action context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept

Synopsis	Accept regular routing to forward a matching packet
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action accept
Tree	accept
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop

Synopsis	Drop a packet matching this entry
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-when

Synopsis	Enable the drop-when context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when
Tree	drop-when
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extracted-traffic

Synopsis	Drop traffic extracted to CPM
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when extracted-traffic
Tree	extracted-traffic
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than condition match value
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit lt <i>number</i>
Tree	lt

Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit range end <i>number</i>
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when hop-limit range start <i>number</i>
Tree	start
Range	0 to 254
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

payload-length

Synopsis	Enable the payload-length context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length
Tree	payload-length
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the length range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the length range
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Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action drop-when payload-length range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward

Synopsis	Enter the forward context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , lsp-container , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , srv6-policy , or vprn-target .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nh-ip

Synopsis	Enable the nh-ip context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: nh-ip or nh-ip-vrf .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

address *ipv6-address*

Synopsis IPv6 address of next hop to forward matching packets

Context **configure** **filter** *ipv6-filter* *filter-name* **entry** *number* **action** **forward** **next-hop** **nh-ip** **address** *ipv6-address*

Tree **address**

Description This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

indirect *boolean*

Synopsis Allow next hop to be indirectly reachable

Context **configure** **filter** *ipv6-filter* *filter-name* **entry** *number* **action** **forward** **next-hop** **nh-ip** **indirect** *boolean*

Tree **indirect**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nh-ip-vrf

Synopsis Enable the **nh-ip-vrf** context

Context **configure** **filter** *ipv6-filter* *filter-name* **entry** *number* **action** **forward** **next-hop** **nh-ip-vrf**

Tree **nh-ip-vrf**

Notes The following elements are part of a mandatory choice: **nh-ip** or **nh-ip-vrf**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address *ipv6-address*

Synopsis IPv6 address of next hop to forward matching packets

Context	configure <i>filter</i> <i>ipv6-filter</i> <i>filter-name</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> <i>next-hop</i> <i>nh-ip-vrf</i> <i>address</i> <i>ipv6-address</i>
Tree	<i>address</i>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure <i>filter</i> <i>ipv6-filter</i> <i>filter-name</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> <i>next-hop</i> <i>nh-ip-vrf</i> <i>indirect</i> <i>boolean</i>
Tree	<i>indirect</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*



WARNING:

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

Synopsis	Routing context for route lookup for forwarding packets
Context	configure <i>filter</i> <i>ipv6-filter</i> <i>filter-name</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> <i>next-hop</i> <i>nh-ip-vrf</i> <i>router-instance</i> <i>string</i>
Tree	<i>router-instance</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-policy *reference*

**WARNING:**

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

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action forward redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>named-item</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , lsp-container , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , srv6-policy , or vprn-target .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

**WARNING:**

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

Synopsis	Router name or VPRN service name
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action forward router-instance <i>string</i>
Tree	router-instance
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , lsp-container , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , srv6-policy , or vprn-target .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-match

Synopsis	Ignore match criteria for the entry
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action ignore-match
Tree	ignore-match

Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate-limit

Synopsis	Enable the rate-limit context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit
Tree	rate-limit
Description	Commands in this context configure the rate-limit action for traffic that matches this filter entry.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than condition match value
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the range
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Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit range end <i>number</i>
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit hop-limit range start <i>number</i>
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

payload-length

Synopsis	Enable the payload-length context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length
Tree	payload-length
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length eq <i>number</i>
Tree	eq
Range	0 to 65535

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the length range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the length range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit payload-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (number | keyword)

Synopsis	Peak information rate
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	0 to 20000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: pir , policer , or pps-pir .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer *named-item*

Synopsis	Policer name to use for rate limiting traffic
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action rate-limit policer <i>named-item</i>
Tree	policer
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: pir , policer , or pps-pir .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary

Synopsis	Enable the secondary context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action secondary
Tree	secondary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward

Synopsis	Enter the forward context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

nh-ip-vrf

Synopsis Enable the **nh-ip-vrf** context

Context **configure** filter *ipv6-filter* *filter-name* *entry* *number* *action* *secondary* *forward* *next-hop* *nh-ip-vrf*

Tree *nh-ip-vrf*

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address *ipv6-address*

Synopsis IPv6 address of next hop to forward matching packets

Context **configure** filter *ipv6-filter* *filter-name* *entry* *number* *action* *secondary* *forward* *next-hop* *nh-ip-vrf* *address* *ipv6-address*

Tree *address*

Description This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

indirect *boolean*

Synopsis Allow next hop to be indirectly reachable

Context **configure** filter *ipv6-filter* *filter-name* *entry* *number* *action* *secondary* *forward* *next-hop* *nh-ip-vrf* *indirect* *boolean*

Tree *indirect*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-instance *string*

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

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-pbr *keyword***WARNING:**

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

Synopsis	PBR that has an effect when this filter is applied on egress
Context	configure filter ipv6-filter filter-name entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log *reference*

Synopsis	Log that is used for packets matching this entry
Context	configure filter ipv6-filter filter-name entry number log reference
Tree	log
Reference	configure filter log number
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure filter ipv6-filter filter-name entry number match
Tree	match
Description	Commands in this context provide match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	configure filter ipv6-filter filter-name entry number match dscp keyword

Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Description	Commands in this context configure a destination address range that is used by filter policy match criteria.
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list reference

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list

Reference	configure filter match-list ipv6-prefix-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-port
Tree	dst-port
Description	Commands in this context configure match criteria for the destination port.
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gt *number*

Synopsis Greater than value as the match criterion

Context **configure** *filter* *ipv6-filter* *filter-name* *entry* *number* *match* *dst-port* *gt* *number*

Tree *gt*

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Less than value as the match criterion

Context **configure** *filter* *ipv6-filter* *filter-name* *entry* *number* *match* *dst-port* *lt* *number*

Tree *lt*

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

port-list *reference*

Synopsis Name of the port list as the match criterion

Context **configure** *filter* *ipv6-filter* *filter-name* *entry* *number* *match* *dst-port* *port-list* *reference*

Tree *port-list*

Reference **configure** *filter* *match-list* *port-list* *named-item*

Max. instances 16

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extension-header

Synopsis	Enter the extension-header context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match extension-header
Tree	extension-header
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ah boolean

Synopsis Match a packet as per the existence of an AH Extension Header

Context **configure** filter ipv6-filter filter-name entry number match extension-header ah boolean

Tree ah

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

esp boolean

Synopsis Match a packet as per the existence of an Encapsulation security payload extension header

Context **configure** filter ipv6-filter filter-name entry number match extension-header esp boolean

Tree esp

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hop-by-hop boolean

Synopsis Match on Hop-by-Hop Options Extension Header existence

Context **configure** filter ipv6-filter filter-name entry number match extension-header hop-by-hop boolean

Tree hop-by-hop

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

routing-type0 boolean

Synopsis Match a packet as per the existence of a routing Extension Header

Context **configure** filter ipv6-filter filter-name entry number match extension-header routing-type0 boolean

Tree routing-type0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

flow-label

Synopsis	Enable the flow-label context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match flow-label
Tree	flow-label
Description	Commands in this context configure the flow label and optional mask match condition.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	Flow label mask for the IPv6 filter entry
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match flow-label mask <i>number</i>
Tree	mask
Description	This command specifies the IPv6 address mask for the flow label filter entry. This value can be expressed in decimal, hexadecimal, or binary format.
Range	1 to 1048575
Default	1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Flow label as a match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match flow-label value <i>number</i>
Tree	value
Description	This command specifies the flow label to use as a match criterion. This value can be expressed in decimal, hexadecimal, or binary format.
Range	0 to 1048575
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Match criterion for fragmented packages
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match icmp
Tree	icmp
Description	Commands in this context configure ICMP values to use as IPv6 filter match criteria.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

code number

Synopsis	ICMPv6 code value to match
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match icmp code <i>number</i>
Tree	code
Description	<p>This command specifies the ICMPv6 code value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP code value of 0 match criterion may match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type number

Synopsis	ICMPv6 type value to match
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match icmp type <i>number</i>
Tree	type
Description	<p>This command specifies the ICMPv6 type value that must be present to match. The system matches on ICMP code or ICMP type, or on both values.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing an ICMP type value of 0 match criterion may match non initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Enter the ip context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match ip
Tree	ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (ipv6-prefix-with-host-bits | ipv6-address)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	<p>'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128</p> <p>'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128</p>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: next-header or next-header-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header-list *reference*

Synopsis	Name of the protocol list as a match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match next-header-list <i>reference</i>
Tree	next-header-list
Reference	configure filter match-list protocol-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: next-header or next-header-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port

Synopsis	Enter the port context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match port gt <i>number</i>

Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2

Platforms7705 SAR Gen 2

end number

SynopsisUpper bound of the port range

Context**configure filter ipv6-filter filter-name entry number match port range end number**

Treeend

Range1 to 65535

NotesThis element is mandatory.

Introduced25.3.R2

Platforms7705 SAR Gen 2

start number

SynopsisLower bound of the port range

Context**configure filter ipv6-filter filter-name entry number match port range start number**

Treestart

Range0 to 65534

NotesThis element is mandatory.

Introduced25.3.R2

Platforms7705 SAR Gen 2

src-ip

SynopsisEnter the **src-ip** context

Context**configure filter ipv6-filter filter-name entry number match src-ip**

Tree**src-ip**

DescriptionCommands in this context configure a source address range that is used by filter policy match criteria.

NotesThe following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).

Introduced25.3.R2

Platforms7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
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Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port
Tree	src-port
Description	Commands in this context configure match criteria for the source port.
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Greater than value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Less than value as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port port-list <i>reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>named-item</i>
Max. instances	16
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the port range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-established

Synopsis	Use ACK or RST status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-established
Tree	tcp-established
Description	When configured to true , a match occurs when the ACK or the RST TCP flag bit is set in the TCP header of an IP packet.
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags
Tree	tcp-flags
Description	Commands in this context configure the use of TCP flags as the IP filter match.
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ack boolean

Synopsis	Use ACK TCP bit status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags ack <i>boolean</i>

Tree	ack
Description	<p>When configured to true, a match occurs when the ACK TCP flag bit, defined in RFC 793, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the ACK TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cwr boolean

Synopsis	Use CWR TCP bit status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags cwr <i>boolean</i>
Tree	cwr
Description	<p>When configured to true, a match occurs when the Congestion Window Reduced (CWR) TCP flag bit, defined in RFC 3168, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the CWR TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ece boolean

Synopsis	Use ECE TCP bit status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags ece <i>boolean</i>
Tree	ece
Description	<p>When configured to true, a match occurs when the ECN-Echo (ECE) TCP flag bit, defined in RFC 3168, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the ECE TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fin boolean

Synopsis	Use FIN TCP bit status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags fin boolean
Tree	fin
Description	<p>When configured to true, a match occurs when the FIN TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the FIN TCP flag bit, defined in RFC 793, is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ns boolean

Synopsis	Use NS TCP bit status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags ns boolean
Tree	ns
Description	<p>When configured to true, a match occurs when the Nonce Sum (NS) TCP flag bit, defined in RFC 3540, is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the NS TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

psh boolean

Synopsis	Use PSH TCP bit status in TCP header as match criterion
Context	configure filter ipv6-filter <i>filter-name</i> entry <i>number</i> match tcp-flags psh boolean
Tree	psh
Description	<p>When configured to true, a match occurs when the Push (PSH) TCP flag bit is set in the TCP header of an IP packet.</p> <p>When configured to false, a match occurs when the Push (PSH) TCP flag bit is not set in the TCP header of an IP packet.</p> <p>When unconfigured, the system does not use the TCP flag as a match criterion.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

rst boolean

Synopsis Use RST TCP bit status in TCP header as match criterion

Context **configure** **filter** **ipv6-filter** *filter-name* **entry** *number* **match tcp-flags rst boolean**

Tree **rst**

Description When configured to **true**, a match occurs when the RST TCP flag bit is set in the TCP header of an IP packet.

When configured to **false**, a match occurs when the RST TCP flag bit is not set in the TCP header of an IP packet.

When unconfigured, the system does not use the TCP flag as a match criterion.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

syn boolean

Synopsis Use SYN TCP bit status in TCP header as match criterion

Context **configure** **filter** **ipv6-filter** *filter-name* **entry** *number* **match tcp-flags syn boolean**

Tree **syn**

Description When configured to **true**, a match occurs when the Synchronize (SYN) TCP flag bit is set in the TCP header of an IP packet.

When configured to **false**, a match occurs when the SYN TCP flag bit is not set in the TCP header of an IP packet.

When unconfigured, the system does not use the TCP flag as a match criterion.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

urg boolean

Synopsis Use URG TCP bit status in TCP header as match criterion

Context **configure** **filter** **ipv6-filter** *filter-name* **entry** *number* **match tcp-flags urg boolean**

Tree **urg**

Description When configured to **true**, a match occurs when the Urgent (URG) TCP flag bit is set in the TCP header of an IP packet.

When configured to **false**, a match occurs when the URG TCP flag bit is not set in the TCP header of an IP packet.

When unconfigured, the system does not use the TCP flag as a match criterion.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

pbr-down-action-override *keyword*

Synopsis Action when PBR or PBF target for this entry is not available
Context **configure** [filter](#) [ipv6-filter](#) *filter-name* [entry](#) *number* [pbr-down-action-override](#) *keyword*
Tree [pbr-down-action-override](#)
Options drop, forward, filter-default-action
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sticky-dest (*number* | *keyword*)

Synopsis Time before action with available PBR or PBF destination and highest priority
Context **configure** [filter](#) [ipv6-filter](#) *filter-name* [entry](#) *number* [sticky-dest](#) (*number* | *keyword*)
Tree [sticky-dest](#)
Range 0 to 65535
Units seconds
Options no-hold-time-up
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

filter-id *number*



WARNING:

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

Synopsis IPv6 filter identifier
Context **configure** [filter](#) [ipv6-filter](#) *filter-name* [filter-id](#) *number*
Tree [filter-id](#)
Range 1 to 65535
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

scope keyword

Synopsis	Scope of the filter definition
Context	configure filter <i>ipv6-filter filter-name scope keyword</i>
Tree	<i>scope</i>
Description	<p>This command configures the filter policy scope.</p> <p>If the scope of the policy is template and is applied to one or more services or network interfaces, the scope cannot be changed.</p>
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log [log-id] number

Synopsis	Enter the log list instance
Context	configure filter <i>log number</i>
Tree	<i>log</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[log-id] number

Synopsis	Filter log identifier
Context	configure filter <i>log number</i>
Tree	<i>log</i>
Range	101 to 199
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of filter logging
Context	configure filter <i>log number admin-state keyword</i>

Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-or-empty*

Synopsis	Text description
Context	configure filter log <i>number</i> description <i>description-or-empty</i>
Tree	description
String length	0 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination

Synopsis	Enter the destination context
Context	configure filter log <i>number</i> destination
Tree	destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

memory

Synopsis	Enter the memory context
Context	configure filter log <i>number</i> destination memory
Tree	memory
Notes	The following elements are part of a choice: memory or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

Synopsis	Maximum number of memory entries that the log can store
Context	configure filter log number destination memory max-entries number
Tree	max-entries
Range	1 to 50000
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stop-on-full *boolean*

Synopsis	Stop logging when maximum number of memory entries is reached or wrap-around is used
Context	configure filter log number destination memory stop-on-full boolean
Tree	stop-on-full
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

syslog

Synopsis	Enter the syslog context
Context	configure filter log number destination syslog
Tree	syslog
Notes	The following elements are part of a choice: memory or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Syslog server definition ID
Context	configure filter log number destination syslog name reference
Tree	name
Reference	configure log syslog log-syslog-name

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary

Synopsis	Enter the summary context
Context	configure filter log number destination syslog summary
Tree	summary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of filter log summarization
Context	configure filter log number destination syslog summary admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary-crit *keyword*

Synopsis	Summary for filter log entries
Context	configure filter log number destination syslog summary summary-crit keyword
Tree	summary-crit
Options	src-addr, dst-addr
Default	src-addr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match-list

Synopsis	Enter the match-list context
Context	configure filter match-list

Tree	match-list
Description	Commands in this context configure match lists to be used in filter policies (IOM/FP and CPM).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list [\[prefix-list-name\]](#) *named-item*

Synopsis	Enter the ip-prefix-list list instance
Context	configure filter match-list ip-prefix-list <i>named-item</i>
Tree	ip-prefix-list
Description	Commands in this context configure a list of IPv4 prefixes for match criteria in IPv4 ACL and CPM filter policies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-list-name] *named-item*

Synopsis	IP prefix list name
Context	configure filter match-list ip-prefix-list <i>named-item</i>
Tree	ip-prefix-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

apply-path

Synopsis	Enter the apply-path context
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path
Tree	apply-path
Description	Commands in this context configure the autogeneration of address prefixes for IPv4 address prefix match lists.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bgp-peers [[criterion-index](#)] *number*

Synopsis Enter the **bgp-peers** list instance

Context **configure** [filter](#) [match-list](#) [ip-prefix-list](#) *named-item* [apply-path](#) [bgp-peers](#) *number*

Tree [bgp-peers](#)

Description Commands in this context configure the unique index for BGP peers.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[criterion-index] *number*

Synopsis Index defining BGP peers for prefix autogeneration

Context **configure** [filter](#) [match-list](#) [ip-prefix-list](#) *named-item* [apply-path](#) [bgp-peers](#) *number*

Tree [bgp-peers](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group *regular-expression-not-all-spaces*



WARNING:

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

Synopsis Regular expression to match against the base router BGP instance group configuration

Context **configure** [filter](#) [match-list](#) [ip-prefix-list](#) *named-item* [apply-path](#) [bgp-peers](#) *number* [group](#) *regular-expression-not-all-spaces*

Tree [group](#)

String length 1 to 255

String format 'regular-expression-not-all-spaces' must contain at least one non-space character

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

neighbor *regular-expression-not-all-spaces*

**WARNING:**

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

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> neighbor <i>regular-expression-not-all-spaces</i>
Tree	neighbor
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

**WARNING:**

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

Synopsis	Router name or VPRN service name
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the router name or service ID as part of apply-path BGP peers.
Default	Base
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name-match *regular-expression-not-all-spaces***WARNING:**

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

Synopsis	Regular expression to match against VPRN service name
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> service-name-match <i>regular-expression-not-all-spaces</i>
Tree	service-name-match
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

interfaces [[criterion-index](#)] *number*

Synopsis	Enter the interfaces list instance
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path interfaces <i>number</i>
Tree	interfaces
Description	Commands in this context configure the interfaces configuration to be used for autogeneration of IPv4 address filter prefix lists.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[criterion-index] *number*

Synopsis	Index defining interfaces for prefix autogeneration
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path interfaces <i>number</i>
Tree	interfaces
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

interface *regular-expression-not-all-spaces***WARNING:**

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

Synopsis	Regular expression defining a match string
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path interfaces <i>number</i> interface <i>regular-expression-not-all-spaces</i>
Tree	interface
Description	This command configures a regular expression to match against interface names under the Base router, IES, and VPRN service configuration.
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

router-instance *string***WARNING:**

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

Synopsis	Router name or VPRN service name
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path interfaces <i>number</i> router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the router name or service name as part of apply-path interfaces.
Default	Base
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

service-name-match *regular-expression-not-all-spaces***WARNING:**

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

Synopsis	Regular expression to match against VPRN service name
Context	configure filter match-list ip-prefix-list <i>named-item</i> apply-path interfaces <i>number</i> service-name-match <i>regular-expression-not-all-spaces</i>
Tree	service-name-match
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter match-list ip-prefix-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [**ip-prefix**] *ipv4-prefix*

Synopsis	Add a list entry for prefix
Context	configure filter match-list ip-prefix-list <i>named-item</i> prefix <i>ipv4-prefix</i>
Tree	prefix
Description	<p>Commands in this context add IPv4 prefixes to the prefix match list. Prefixes can overlap IPv4 address space.</p> <p>An IPv4 prefix addition is blocked if resource exhaustion is detected anywhere in the system due to filter policies that use the prefix list.</p>
Max. instances	8192

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] *ipv4-prefix*

Synopsis	IPv4 prefix to be added to the prefix list
Context	configure filter match-list ip-prefix-list <i>named-item</i> prefix <i>ipv4-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-exclude **[ip-prefix]** *ipv4-prefix*

Synopsis	Add a list entry for prefix-exclude
Context	configure filter match-list ip-prefix-list <i>named-item</i> prefix-exclude <i>ipv4-prefix</i>
Tree	prefix-exclude
Description	Commands in this context exclude IPv4 prefixes from the prefix match list. This command is mutually exclusive with the apply-path command.
Max. instances	512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] *ipv4-prefix*

Synopsis	IPv4 prefix to be added to the prefix list
Context	configure filter match-list ip-prefix-list <i>named-item</i> prefix-exclude <i>ipv4-prefix</i>
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list [[prefix-list-name](#)] *named-item*

Synopsis	Enter the ipv6-prefix-list list instance
Context	configure filter match-list ipv6-prefix-list <i>named-item</i>
Tree	ipv6-prefix-list
Description	Commands in this context configure a list of IPv6 prefixes for match criteria in ACL and CPM IPv6 filter policies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-list-name] *named-item*

Synopsis	IP prefix list name
Context	configure filter match-list ipv6-prefix-list <i>named-item</i>
Tree	ipv6-prefix-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

apply-path

Synopsis	Enter the apply-path context
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path
Tree	apply-path
Description	Commands in this context configure the autogeneration of address prefixes for IPv6 address prefix match lists.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-peers [[criterion-index](#)] *number*

Synopsis	Enter the bgp-peers list instance
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i>

Tree	bgp-peers
Description	Commands in this context configure the unique index for BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[criterion-index] *number*

Synopsis	Index defining BGP peers for prefix autogeneration
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *regular-expression-not-all-spaces*



WARNING:

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

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> group <i>regular-expression-not-all-spaces</i>
Tree	group
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor *regular-expression-not-all-spaces*



WARNING:

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

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> neighbor <i>regular-expression-not-all-spaces</i>
Tree	neighbor
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*



WARNING:

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

Synopsis	Router name or VPRN service name
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the router name or service ID as part of apply-path BGP peers.
Default	Base
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name-match *regular-expression-not-all-spaces*



WARNING:

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

Synopsis	Regular expression to match against VPRN service name
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path bgp-peers <i>number</i> service-name-match <i>regular-expression-not-all-spaces</i>
Tree	service-name-match

String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

interfaces [[criterion-index](#)] *number*

Synopsis	Enter the interfaces list instance
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path interfaces <i>number</i>
Tree	interfaces
Description	Commands in this context configure the interfaces configuration to be used for the autogeneration of IPv6 address filter prefix lists.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[criterion-index] *number*

Synopsis	Index defining interfaces for prefix autogeneration
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path interfaces <i>number</i>
Tree	interfaces
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

interface *regular-expression-not-all-spaces*



WARNING:

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

Synopsis	Regular expression defining a match string
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path interfaces <i>number</i> interface <i>regular-expression-not-all-spaces</i>
Tree	interface

Description	This command configures a regular expression to match against interface names under the Base router, IES, and VPRN service configuration.
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

router-instance *string*



WARNING:

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

Synopsis	Router name or VPRN service name
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path interfaces <i>number</i> router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the router name or service name as part of apply-path interfaces.
Default	Base
Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

service-name-match *regular-expression-not-all-spaces*



WARNING:

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

Synopsis	Regular expression to match against VPRN service name
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> apply-path interfaces <i>number</i> service-name-match <i>regular-expression-not-all-spaces</i>
Tree	service-name-match
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character

Notes	The following elements are part of a choice: router-instance or service-name-match .
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ipv6-prefix](#)] *ipv6-prefix*

Synopsis	Add a list entry for prefix
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Max. instances	8192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 prefix to be added to the prefix list
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-exclude [[ipv6-prefix](#)] *ipv6-prefix*

Synopsis	Add a list entry for prefix-exclude
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> prefix-exclude <i>ipv6-prefix</i>
Tree	prefix-exclude
Description	Commands in this context exclude IPv6 prefixes from the prefix match list. This command is mutually exclusive with the apply-path command.
Max. instances	512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 prefix to be added to the prefix list
Context	configure filter match-list ipv6-prefix-list <i>named-item</i> prefix-exclude <i>ipv6-prefix</i>
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-list [[port-list-name](#)] *named-item*

Synopsis	Enter the port-list list instance
Context	configure filter match-list port-list <i>named-item</i>
Tree	port-list
Max. instances	5120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[port-list-name] *named-item*

Synopsis	Port list name
Context	configure filter match-list port-list <i>named-item</i>

Tree	port-list
Description	This command specifies the port list name. If special characters are used (#, \$, spaces, and so on), the string must be enclosed within double quotes.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter match-list port-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [[value](#)] *number*

Synopsis	Add a list entry for port
Context	configure filter match-list port-list <i>named-item</i> port <i>number</i>
Tree	port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[value] *number*

Synopsis	Port value
Context	configure filter match-list port-list <i>named-item</i> port <i>number</i>
Tree	port
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

range *start number end number*

Synopsis Add a list entry for **range**

Context **configure** *filter match-list port-list named-item range start number end number*

Tree *range*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start *number*

Synopsis Lower bound of the port list range

Context **configure** *filter match-list port-list named-item range start number end number*

Tree *range*

Range 0 to 65534

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end *number*

Synopsis Upper bound of the port list range

Context **configure** *filter match-list port-list named-item range start number end number*

Tree *range*

Range 1 to 65535

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

protocol-list [*protocol-list-name*] *named-item*

Synopsis Enter the **protocol-list** list instance

Context **configure** *filter match-list protocol-list named-item*

Tree *protocol-list*

Max. instances	512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[protocol-list-name] *named-item*

Synopsis	Protocol list name
Context	configure filter match-list protocol-list <i>named-item</i>
Tree	protocol-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter match-list protocol-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Add a list entry for protocol
Context	configure filter match-list protocol-list <i>named-item</i> protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP protocol identifier
Context	configure filter match-list protocol-list <i>named-item</i> protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure filter md-auto-id
Tree	md-auto-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter-id-range

Synopsis	Enable the filter-id-range context
Context	configure filter md-auto-id filter-id-range
Tree	filter-id-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*



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

Synopsis	Upper bound of the ID range
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Context	configure filter md-auto-id filter-id-range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*



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

Synopsis	Lower bound of the ID range
Context	configure filter md-auto-id filter-id-range start <i>number</i>
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-name](#)] *named-item*

Synopsis	Enter the policer list instance
Context	configure filter policer <i>named-item</i>
Tree	policer
Description	Commands in this context configure policer options.
Max. instances	8192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-name] *named-item*

Synopsis	Name of the policer for use in a filter policy
Context	configure filter policer <i>named-item</i>

Tree	policer
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter policer <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum burst size
Context	configure filter policer <i>named-item</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Notes	The following elements are part of a choice: (mbs and pir) or pps-pir .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *number*

Synopsis	Peak information rate
Context	configure filter policer <i>named-item</i> pir <i>number</i>
Tree	pir

Range	0 to 2000000000
Units	kilobps
Notes	The following elements are part of a choice: (mbs and pir) or pps-pir .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope keyword



WARNING:

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

Synopsis	Policer scope
Context	configure filter policer <i>named-item</i> scope keyword
Tree	scope
Description	<p>This command configures the scope for the policer object.</p> <p>When the system scope is configured, it creates an instance of the policer for each direction immediately after the policer is configured and shares the instance with all filter entries that reference that policer name applied in the same direction.</p> <p>When the filter scope is configured, it configures the policer instance to be shared by rate-limit entries that are part of the same filter policy and are applied in the same direction.</p>
Options	filter – Policer shared by entries in same filter policer system – Single policer shared by the system
Default	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-policy [*redirect-policy-name*] *named-item*

Synopsis	Enter the redirect-policy list instance
Context	configure filter redirect-policy <i>named-item</i>
Tree	redirect-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[redirect-policy-name] *named-item*

Synopsis	Redirect policy name
Context	configure filter redirect-policy <i>named-item</i>
Tree	redirect-policy
Description	This command specifies the redirect policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the redirect policy
Context	configure filter redirect-policy <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter redirect-policy <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination [[destination-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the destination list instance
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[destination-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address and type of destination
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the destination
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-test

Synopsis	Enable the ping-test context
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test
Tree	ping-test
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Number of consecutive requests that fail before destination is declared unreachable
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test drop-count <i>number</i>
Tree	drop-count
Range	1 to 60
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down *number*

Synopsis	Time for the system to be held down if this test has marked it unreachable
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test hold-down <i>number</i>
Tree	hold-down
Range	0 to 86400
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Time between consecutive requests which are sent to the far end host
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test interval <i>number</i>
Tree	interval
Range	1 to 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address to use in the IP packet of the ping test
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time required to receive a response from the far end host
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test timeout <i>number</i>
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority for this destination
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) priority <i>number</i>
Tree	priority
Range	1 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-rt-test

Synopsis	Enable the unicast-rt-test context
Context	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) unicast-rt-test
Tree	unicast-rt-test
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

notify-dest-change *boolean*

Synopsis	Send notifications when the active destination changes
Context	configure filter redirect-policy <i>named-item</i> notify-dest-change <i>boolean</i>
Tree	notify-dest-change
Description	<p>When configured to true, notifications (such as Log and SNMP) are sent when the active destination of a redirect policy changes. No notification is sent when there are no more active destinations (as this scenario is covered by another notification).</p> <p>When configured to false, the notification generation is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Routing context to use for route lookup
----------	---

Context	configure filter redirect-policy <i>named-item</i> router-instance <i>string</i>
Tree	router-instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sticky-dest (*number* | *keyword*)

Synopsis	Time required by system before applying the current best destination as active destination
Context	configure filter redirect-policy <i>named-item</i> sticky-dest (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-policy-binding [*binding-name*] *named-item*

Synopsis	Enter the redirect-policy-binding list instance
Context	configure filter redirect-policy-binding <i>named-item</i>
Tree	redirect-policy-binding
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[binding-name] *named-item*

Synopsis	Binding name
Context	configure filter redirect-policy-binding <i>named-item</i>
Tree	redirect-policy-binding
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

binding-operator *keyword*

Synopsis	Logical operator used to obtain the master test result
Context	configure filter redirect-policy-binding <i>named-item</i> binding-operator <i>keyword</i>
Tree	binding-operator
Description	This command configures the logical operator to use with the destinations' test results to obtain the master test result (the redirect policy binding test result).
Options	and, or
Default	and
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-policy [**redirect-policy-name**] *reference*

Synopsis	Enter the redirect-policy list instance
Context	configure filter redirect-policy-binding <i>named-item</i> redirect-policy <i>reference</i>
Tree	redirect-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[redirect-policy-name] *reference*

Synopsis	Redirect policy name
Context	configure filter redirect-policy-binding <i>named-item</i> redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination [[destination-address](#)] *reference*

Synopsis	Add a list entry for destination
Context	configure filter redirect-policy-binding <i>named-item</i> redirect-policy <i>reference</i> destination <i>reference</i>
Tree	destination
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[destination-address] *reference*

Synopsis	IP address of redirect policy destination to binding
Context	configure filter redirect-policy-binding <i>named-item</i> redirect-policy <i>reference</i> destination <i>reference</i>
Tree	destination
Reference	configure filter redirect-policy <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-filter

Synopsis	Enter the system-filter context
Context	configure filter system-filter
Tree	system-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip [[ip-filter](#)] *reference*

Synopsis	Add a list entry for ip
Context	configure filter system-filter ip <i>reference</i>
Tree	ip

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-filter] *reference*

Synopsis	Active IPv4 system filter policy
Context	configure filter system-filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 [[ipv6-filter](#)] *reference*

Synopsis	Add a list entry for ipv6
Context	configure filter system-filter ipv6 <i>reference</i>
Tree	ipv6
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-filter] *reference*

Synopsis	Active IPv6 system filter policy
Context	configure filter system-filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.10 group-encryption commands

```
configure
- group-encryption
  - apply-groups reference
  - apply-groups-exclude reference
  - encryption-keygroup number
    - active-outbound-security-association reference
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-algorithm keyword
    - description description
    - encryption-algorithm keyword
    - keygroup-name named-item-64-or-empty
    - security-association number
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key encrypted-leaf-hex
      - encryption-key encrypted-leaf-hex
  - group-encryption-label number
```

4.10.1 group-encryption command descriptions

group-encryption

Synopsis	Enter the group-encryption context
Context	configure group-encryption
Tree	group-encryption
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-keygroup [[id](#)] *number*

Synopsis	Enter the encryption-keygroup list instance
Context	configure group-encryption encryption-keygroup <i>number</i>
Tree	encryption-keygroup
Max. instances	127
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[id\]](#) *number*

Synopsis	Encryption key group ID
Context	configure group-encryption encryption-keygroup <i>number</i>
Tree	encryption-keygroup
Range	1 to 127
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

active-outbound-security-association *reference*

Synopsis	SPI to use for egressing packets for the key group
Context	configure group-encryption encryption-keygroup <i>number</i> active-outbound-security-association <i>reference</i>

Tree	active-outbound-security-association
Reference	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-algorithm *keyword*



WARNING:

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

Synopsis	Hashing algorithm used for the authentication function
Context	configure group-encryption encryption-keygroup <i>number</i> authentication-algorithm <i>keyword</i>
Tree	authentication-algorithm
Options	sha256, sha512
Default	sha256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure group-encryption encryption-keygroup <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-algorithm *keyword*



WARNING:

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

Synopsis	Encryption algorithm for encryption on ESP
----------	--

Context	configure group-encryption encryption-keygroup <i>number</i> encryption-algorithm <i>keyword</i>
Tree	encryption-algorithm
Options	aes128, aes256
Default	aes128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keygroup-name *named-item-64-or-empty*

Synopsis	Key group name
Context	configure group-encryption encryption-keygroup <i>number</i> keygroup-name <i>named-item-64-or-empty</i>
Tree	keygroup-name
String length	0 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security-association [[security-parameter-index](#)] *number*

Synopsis	Enter the security-association list instance
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Tree	security-association
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[security-parameter-index] *number*

Synopsis	Security Parameter Index (SPI)
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Tree	security-association
Range	1 to 1023
Notes	This element is part of a list key.

Introduced25.3.R2

Platforms7705 SAR Gen 2

authentication-key *encrypted-leaf-hex*



WARNING:

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

Synopsis	Key used for the authentication algorithm
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i> authentication-key <i>encrypted-leaf-hex</i>
Tree	authentication-key
Description	<p>This command specifies the key used for the authentication algorithm in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 166
String format	'encrypted-leaf-hex' must have clear text in hex with prefix 0x or end with hash/hash2/hash3/custom
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-key *encrypted-leaf-hex*



WARNING:

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

Synopsis	Key used for the encryption algorithm
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i> encryption-key <i>encrypted-leaf-hex</i>
Tree	encryption-key
Description	<p>This command specifies the key used for the encryption algorithm in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>

String length	1 to 126
String format	'encrypted-leaf-hex' must have clear text in hex with prefix 0x or end with hash/hash2/hash3/custom
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-encryption-label *number*



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

Synopsis	Network-wide unique MPLS label for group encryption
Context	configure group-encryption group-encryption-label <i>number</i>
Tree	group-encryption-label
Range	32 to 2047
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.11 ipsec commands

```

configure
- ipsec
  - apply-groups reference
  - apply-groups-exclude reference
  - cert-profile named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - cert pki-file-name
      - compare-chain-include reference
      - key pki-file-name
      - rsa-signature keyword
      - send-chain
        - ca-profile reference
  - client-db named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client number
      - action keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
    - client-name named-item
  - credential
    - pre-shared-key encrypted-leaf-hex-without-prefix
  - identification
    - idi
      - any boolean
      - fqdn display-string-or-empty
      - fqdn-suffix display-string-or-empty
      - ipv4-prefix ipv4-prefix
      - ipv4-prefix-any boolean
      - ipv6-prefix ipv6-prefix
      - ipv6-prefix-any boolean
      - regexp display-string-or-empty
      - rfc822 display-string-or-empty
      - rfc822-suffix display-string-or-empty
    - peer-ip-prefix
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ipv4-only boolean
      - ipv6-only boolean
  - local
    - address-assignment
      - ipv4
        - dhcp-server named-item
        - pool named-item
        - router-instance string
        - secondary-pool named-item

```

configure ipsec client-db client local address-assignment ipv6

```

    - ipv6
      - dhcp-server named-item
      - pool named-item
      - router-instance string
    - private-interface named-item
    - private-service-name service-name
    - ts-list named-item
    - tunnel-template number
  - description description
  - match-list
    - idi boolean
    - peer-ip-prefix boolean
  - ike-policy number
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - dpd
    - interval number
    - max-retries number
    - reply-only boolean
  - ike-transform reference
  - ike-version-1
    - auth-method keyword
    - ike-mode keyword
    - own-auth-method keyword
    - ph1-responder-delete-notify boolean
  - ike-version-2
    - auth-method keyword
    - auto-eap-method keyword
    - ikev2-fragment
      - mtu number
      - reassembly-timeout number
    - own-auth-method keyword
    - own-auto-eap-method keyword
    - ppk-required boolean
    - send-idr-after-eap-success boolean
  - ipsec-lifetime number
  - limit-init-exchange
    - admin-state keyword
    - reduced-max-exchange-timeout (number | keyword)
  - lockout
    - block (number | keyword)
    - duration number
    - failed-attempts number
    - max-port-per-ip number
  - match-peer-id-to-cert boolean
  - nat-traversal
    - force boolean
    - force-keep-alive boolean
    - keep-alive-interval number
  - pfs
    - dh-group keyword
  - relay-unsolicited-cfg-attribute
    - internal-ip4-address boolean
    - internal-ip4-dns boolean
    - internal-ip4-netmask boolean
    - internal-ip6-address boolean
    - internal-ip6-dns boolean
  - ike-transform number
    - apply-groups reference
    - apply-groups-exclude reference
    - dh-group keyword
    - ike-auth-algorithm keyword
    - ike-encryption-algorithm keyword

```

configure ipsec ike-transform ike-prf-algorithm

- **ike-prf-algorithm** keyword
- **isakmp-lifetime** number
- **ipsec-transform** number
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **esp-auth-algorithm** keyword
 - **esp-encryption-algorithm** keyword
 - **extended-sequence-number** boolean
 - **ipsec-lifetime** number
 - **pfs-dh-group** keyword
- **ipsec-transport-mode-profile** named-item
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **key-exchange**
 - **dynamic**
 - **auto-establish** boolean
 - **cert**
 - **cert-profile** reference
 - **status-verify**
 - **default-result** keyword
 - **primary** keyword
 - **secondary** keyword
 - **trust-anchor-profile** reference
 - **id**
 - **fqdn** fully-qualified-domain-name
 - **ipv4** ipv4-unicast-address
 - **ipv6** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **ike-policy** reference
 - **ipsec-transform** reference
 - **ppk**
 - **id** reference
 - **list** reference
 - **pre-shared-key** encrypted-leaf
 - **max-history-key-records**
 - **esp** number
 - **ike** number
 - **replay-window** number
 - **ppk-list** named-item
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **ppk** named-item-64
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **value**
 - **ascii** encrypted-leaf
 - **hex** encrypted-leaf-hex
 - **radius**
 - **accounting-policy** named-item
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **include-radius-attribute**
 - **acct-stats** boolean
 - **called-station-id** boolean
 - **calling-station-id** boolean
 - **framed-ip-addr** boolean
 - **framed-ipv6-prefix** boolean
 - **nas-identifier** boolean
 - **nas-ip-addr** boolean
 - **nas-port-id** boolean
 - **radius-server-policy** reference
 - **update-interval**
 - **jitter** number
 - **value** number

configure ipsec radius authentication-policy

```

- authentication-policy named-item
- apply-groups reference
- apply-groups-exclude reference
- include-radius-attribute
  - called-station-id boolean
  - calling-station-id boolean
  - client-cert-subject-key-id boolean
  - nas-identifier boolean
  - nas-ip-addr boolean
  - nas-port-id boolean
- password encrypted-leaf
- radius-server-policy reference
- show-ipsec-keys boolean
- static-sa named-item
- apply-groups reference
- apply-groups-exclude reference
- authentication
  - algorithm keyword
  - key encrypted-leaf
- description named-item
- direction keyword
- protocol keyword
- spi number
- trust-anchor-profile named-item
- apply-groups reference
- apply-groups-exclude reference
- trust-anchor reference
- ts-list named-item
- apply-groups reference
- apply-groups-exclude reference
- local
  - entry number
  - address
    - prefix (ipv4-prefix | ipv6-prefix)
    - range
      - begin (ipv4-address-no-zone | ipv6-address-no-zone)
      - end (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - protocol
    - any
    - id
      - icmp
        - opaque
        - port-range
          - begin-icmp-code number
          - begin-icmp-type number
          - end-icmp-code number
          - end-icmp-type number
      - icmp6
        - opaque
        - port-range
          - begin-icmp-code number
          - begin-icmp-type number
          - end-icmp-code number
          - end-icmp-type number
      - mipv6
        - opaque
        - port-range
          - begin number
          - end number
    - protocol-id-with-any-port (keyword | number)
  - sctp
    - opaque

```

configure ipsec ts-list local entry protocol id sctp port-range

```

    - port-range
      - begin number
      - end number
    - tcp
      - opaque
      - port-range
        - begin number
        - end number
    - udp
      - opaque
      - port-range
        - begin number
        - end number
  - remote
    - entry number
      - address
        - prefix (ipv4-prefix | ipv6-prefix)
        - range
          - begin (ipv4-address-no-zone | ipv6-address-no-zone)
          - end (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - protocol
        - any
        - id
          - icmp
            - opaque
            - port-range
              - begin-icmp-code number
              - begin-icmp-type number
              - end-icmp-code number
              - end-icmp-type number
          - icmp6
            - opaque
            - port-range
              - begin-icmp-code number
              - begin-icmp-type number
              - end-icmp-code number
              - end-icmp-type number
          - mipv6
            - opaque
            - port-range
              - begin number
              - end number
          - protocol-id-with-any-port (keyword | number)
        - sctp
          - opaque
          - port-range
            - begin number
            - end number
        - tcp
          - opaque
          - port-range
            - begin number
            - end number
        - udp
          - opaque
          - port-range
            - begin number
            - end number
      - tunnel-template number
        - apply-groups reference
        - apply-groups-exclude reference
        - clear-df-bit boolean

```

configure ipsec tunnel-template copy-traffic-class-upon-decapsulation

```
- copy-traffic-class-upon-decapsulation boolean
- description description
- encapsulated-ip-mtu number
- icmp-generation
  - frag-required
    - admin-state keyword
    - interval number
    - message-count number
- icmp6-generation
  - pkt-too-big
    - admin-state keyword
    - interval number
    - message-count number
- ignore-default-route boolean
- ip-mtu number
- ipsec-transform reference
- pmtu-discovery-aging number
- ppk-list reference
- private-tcp-mss-adjust number
- propagate-pmtu-v4 boolean
- propagate-pmtu-v6 boolean
- public-tcp-mss-adjust (number | keyword)
- replay-window number
- reverse-route
  - metric number
  - preference number
- sp-reverse-route keyword
```

4.11.1 ipsec command descriptions

ipsec

Synopsis	Enter the ipsec context
Context	configure ipsec
Tree	ipsec
Description	Commands in this context configure Internet Protocol Security (IPsec) commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-profile [[name](#)] *named-item*

Synopsis	Enter the cert-profile list instance
Context	configure ipsec cert-profile <i>named-item</i>
Tree	cert-profile
Description	Commands in this context configure the certificate profile.
Max. instances	10200
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[[name](#)] *named-item*

Synopsis	Certificate profile name
Context	configure ipsec cert-profile <i>named-item</i>
Tree	cert-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the certificate profile
Context	configure ipsec cert-profile <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i>
Tree	entry
Description	Commands in this context configure the certificate profile entry.
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	Certificate profile entry ID
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i>
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert *pki-file-name*

Synopsis	File name of the imported certificate for the entry
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i> cert <i>pki-file-name</i>

Tree	cert
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

compare-chain-include *reference*

Synopsis	CA profile to include in the compare-chain
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i> compare-chain-include <i>reference</i>
Tree	compare-chain-include
Description	This command specifies the Certificate Authority (CA) that needs to be included in the compare-chain for the entry. This configuration is required in instances where the configured root CA is cross-signed by another CA.
Reference	configure system security pki ca-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

key *pki-file-name*

Synopsis	File name of the imported key used for authentication
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i> key <i>pki-file-name</i>
Tree	key
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

rsa-signature *keyword*

Synopsis	Signature scheme for the RSA key
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i> rsa-signature <i>keyword</i>
Tree	rsa-signature
Options	pkcs1, pss

Default	pkcs1
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

send-chain

Synopsis	Enter the send-chain context
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i> send-chain
Tree	send-chain
Description	Commands in this context allow the system to send additional CA certificates to the peer. These additional CA certificates must be in the certificate chain of the certificate specified by the cert command in the same entry.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ca-profile *reference*

Synopsis	CA certificate to send to the peer
Context	configure ipsec cert-profile <i>named-item</i> entry <i>number</i> send-chain ca-profile <i>reference</i>
Tree	ca-profile
Reference	configure system security pki ca-profile <i>named-item</i>
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client-db [[name](#)] *named-item*

Synopsis	Enter the client-db list instance
Context	configure ipsec client-db <i>named-item</i>
Tree	client-db
Max. instances	1000
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec client database name
Context	configure ipsec client-db <i>named-item</i>
Tree	client-db
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the client database
Context	configure ipsec client-db <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client [[id](#)] *number*

Synopsis	Enter the client list instance
Context	configure ipsec client-db <i>named-item</i> client <i>number</i>
Tree	client
Description	Commands in this context configure the IPsec client entry in the client database.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	Client ID
Context	configure ipsec client-db <i>named-item</i> client <i>number</i>
Tree	client

Range	1 to 8000
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

action *keyword*

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

Synopsis	IPsec client action
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> action <i>keyword</i>
Tree	action
Options	accept – Accept the IPsec client reject – Reject the IPsec client
Default	accept
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the database client
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert

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

Synopsis	Enter the cert context
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Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert
Tree	cert
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

**WARNING:**

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

Synopsis	Certificate Profile name associated with this client
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>named-item</i>
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify

**WARNING:**

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

Synopsis	Enable the status-verify context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert status-verify
Tree	status-verify
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

**WARNING:**

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

Synopsis	The default result of Certificate Status Verification
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Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert status-verify default-result <i>keyword</i>
Tree	default-result
Options	revoked, good
Default	revoked
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

**WARNING:**

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

Synopsis	The primary method used to verify the peer certificate's revocation status
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert status-verify primary <i>keyword</i>
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

**WARNING:**

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

Synopsis	The secondary method used to verify the peer certificate's revocation status
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert status-verify secondary <i>keyword</i>
Tree	secondary
Options	none, crl, ocsp
Default	none
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference***WARNING:**

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

Synopsis	Trust Anchor Profile name associated with this client
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client-name *named-item***WARNING:**

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

Synopsis	Client name
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> client-name <i>named-item</i>
Tree	client-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

credential**WARNING:**

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

Synopsis	Enter the credential context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> credential
Tree	credential
Description	Commands in this context authenticate peers.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf-hex-without-prefix*



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

Synopsis	Pre-shared key used to authenticate peers
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> credential pre-shared-key encrypted-leaf-hex-without-prefix
Tree	pre-shared-key
Description	<p>This command specifies the pre-shared key used to authenticate peers in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 166
String format	'encrypted-leaf-hex-without-prefix' must have clear text in hex without 0x or end with hash/hash2/hash3/custom
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

identification



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

Synopsis	Enter the identification context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification
Tree	identification
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

idi

**WARNING:**

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

Synopsis	Enable the idi context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi
Tree	idi
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

**WARNING:**

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

Synopsis	Accept any IDi value as a match
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi any <i>boolean</i>
Tree	any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regexp , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *display-string-or-empty*

**WARNING:**

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

Synopsis	FQDN used as the match criteria for the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi fqdn <i>display-string-or-empty</i>
Tree	fqdn
String length	0 to 255

Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regexp , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn-suffix *display-string-or-empty*



WARNING:

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

Synopsis	FQDN suffix used as the match criteria for the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi fqdn-suffix <i>display-string-or-empty</i>
Tree	fqdn-suffix
String length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regexp , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4-prefix *ipv4-prefix*



WARNING:

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

Synopsis	IPv4 prefix used as the match criteria for the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi ipv4-prefix <i>ipv4-prefix</i>
Tree	ipv4-prefix
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regexp , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4-prefix-any *boolean*

**WARNING:**

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

Synopsis	Accept any valid IPv4 prefix as a match for the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification <i>idi</i> ipv4-prefix-any <i>boolean</i>
Tree	ipv4-prefix-any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regex , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-prefix *ipv6-prefix*

**WARNING:**

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

Synopsis	IPv6 prefix used as the match criteria for the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification <i>idi</i> ipv6-prefix <i>ipv6-prefix</i>
Tree	ipv6-prefix
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regex , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-prefix-any *boolean*

**WARNING:**

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

Synopsis	Accept any valid IPv6 prefix as a match for the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification <i>idi</i> ipv6-prefix-any <i>boolean</i>

Tree	ipv6-prefix-any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regex , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

regex *display-string-or-empty*



WARNING:

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

Synopsis	Regular expression pattern used to match the IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi regex <i>display-string-or-empty</i>
Tree	regex
String length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regex , rfc822 , or rfc822-suffix .
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

rfc822 *display-string-or-empty*



WARNING:

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

Synopsis	Email address (RFC 822) used as match criteria for IDi
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi rfc822 <i>display-string-or-empty</i>
Tree	rfc822
String length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regex , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

rfc822-suffix *display-string-or-empty***WARNING:**

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

Synopsis	Email address domain (RFC 822) as IDi match criteria
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification idi rfc822-suffix <i>display-string-or-empty</i>
Tree	rfc822-suffix
String length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , regexp , rfc822 , or rfc822-suffix .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

peer-ip-prefix**WARNING:**

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

Synopsis	Enable the peer-ip-prefix context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification peer-ip-prefix
Tree	peer-ip-prefix
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)**WARNING:**

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

Synopsis	IP prefix used as the match criteria
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification peer-ip-prefix ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix

Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4-only *boolean*

**WARNING:**

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

Synopsis	Accept any valid IPv4 address as a match
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification peer-ip-prefix ipv4-only <i>boolean</i>
Tree	ipv4-only
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-only *boolean*

**WARNING:**

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

Synopsis	Accept any valid IPv6 address as a match
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> identification peer-ip-prefix ipv6-only <i>boolean</i>
Tree	ipv6-only
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local

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

Synopsis	Enter the local context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local
Tree	local
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-assignment

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

Synopsis	Enter the address-assignment context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment
Tree	address-assignment
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4

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

Synopsis	Enter the ipv4 context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv4
Tree	ipv4
Description	Commands in this context configure the local address assignment for IPv4.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-server *named-item*

**WARNING:**

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

Synopsis	Local DHCPv4 server name
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv4 dhcp-server <i>named-item</i>
Tree	dhcp-server
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool *named-item*

**WARNING:**

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

Synopsis	DHCPv4 server pool name
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv4 pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *string*

**WARNING:**

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

Synopsis	Router instance for the local DHCPv4 server
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Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv4 router-instance <i>string</i>
Tree	router-instance
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary-pool *named-item*



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

Synopsis	DHCPv4 secondary server pool name
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv4 secondary-pool <i>named-item</i>
Tree	secondary-pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6



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

Synopsis	Enter the ipv6 context
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv6
Tree	ipv6
Description	Commands in this context configure the local address assignment for IPv6.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-server *named-item*

**WARNING:**

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

Synopsis	Local DHCPv6 server name
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv6 dhcp-server <i>named-item</i>
Tree	dhcp-server
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool *named-item*

**WARNING:**

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

Synopsis	DHCPv6 server pool name
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv6 pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *string*

**WARNING:**

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

Synopsis	Router instance for the local DHCPv6 server
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Context	configure ipsec client-db <i>named-item</i> client <i>number</i> local address-assignment ipv6 router-instance <i>string</i>
Tree	router-instance
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-interface *named-item*



WARNING:

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

Synopsis	Private interface name used for tunnel setup
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> private-interface <i>named-item</i>
Tree	private-interface
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-service-name *service-name*



WARNING:

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

Synopsis	Name of the private service used for tunnel setup
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> private-service-name <i>service-name</i>
Tree	private-service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ts-list *named-item***WARNING:**

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

Synopsis	Traffic selector list used by the tunnel
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> ts-list <i>named-item</i>
Tree	ts-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-template *number***WARNING:**

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

Synopsis	Tunnel template ID
Context	configure ipsec client-db <i>named-item</i> client <i>number</i> tunnel-template <i>number</i>
Tree	tunnel-template
Range	1 to 2048
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure ipsec client-db <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

match-list

**WARNING:**

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

Synopsis	Enter the match-list context
Context	configure ipsec client-db <i>named-item</i> match-list
Tree	match-list
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

idi *boolean*

**WARNING:**

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

Synopsis	Use IDi type in the IPsec client matching process
Context	configure ipsec client-db <i>named-item</i> match-list idi <i>boolean</i>
Tree	idi
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

peer-ip-prefix *boolean*

**WARNING:**

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

Synopsis	Use the peer tunnel IP address in the matching process
Context	configure ipsec client-db <i>named-item</i> match-list peer-ip-prefix <i>boolean</i>
Tree	peer-ip-prefix
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy [*id*] *number*

Synopsis	Enter the ike-policy list instance
Context	configure ipsec ike-policy <i>number</i>
Tree	ike-policy
Description	Commands in this context configure an Internet Key Exchange (IKE) policy.
Max. instances	2048
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	IKE policy ID
Context	configure ipsec ike-policy <i>number</i>
Tree	ike-policy
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure ipsec ike-policy <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dpd

Synopsis	Enable the dpd context
Context	configure ipsec ike-policy <i>number</i> dpd

Tree	dpd
Description	Commands in this context configure the dead peer detection mechanism.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

Synopsis	DPD interval
Context	configure ipsec ike-policy <i>number</i> dpd interval <i>number</i>
Tree	interval
Description	<p>This command specifies the DPD interval.</p> <p>Because more time is necessary to determine if there is incoming traffic, the actual time needed to bring down the tunnel is larger than the DPD interval multiplied by the value configured for maximum retry attempts.</p>
Range	10 to 300
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-retries *number*

Synopsis	Maximum number of retries before the tunnel is removed
Context	configure ipsec ike-policy <i>number</i> dpd max-retries <i>number</i>
Tree	max-retries
Range	2 to 5
Default	3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reply-only *boolean*

Synopsis	Initiate DPD request for incoming ESP or IKE packets
Context	configure ipsec ike-policy <i>number</i> dpd reply-only <i>boolean</i>
Tree	reply-only

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-transform *reference*

Synopsis	IKE transform instance associated with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-transform <i>reference</i>
Tree	ike-transform
Description	This command specifies the IKE transform instance associated with the IKE policy. If multiple IDs are specified, the system selects an IKE transform based on the proposal of the peer. If the system is a tunnel initiator, it uses the configured IKE transform to generate the SA payload.
Reference	configure ipsec ike-transform <i>number</i>
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-version-1

Synopsis	Enable the ike-version-1 context
Context	configure ipsec ike-policy <i>number</i> ike-version-1
Tree	ike-version-1
Description	Commands in this context configure the IKE version 1 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: ike-version-1 or ike-version-2 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-version-1 auth-method <i>keyword</i>
Tree	auth-method
Options	psk, plain-psk-xauth

Default	psk
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-mode *keyword*

Synopsis	Mode of operation
Context	configure ipsec ike-policy <i>number</i> ike-version-1 ike-mode <i>keyword</i>
Tree	ike-mode
Options	main, aggressive
Default	main
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

own-auth-method *keyword*

Synopsis	Authentication method used with policy on its own side
Context	configure ipsec ike-policy <i>number</i> ike-version-1 own-auth-method <i>keyword</i>
Tree	own-auth-method
Options	symmetric
Default	symmetric
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ph1-responder-delete-notify *boolean*

Synopsis	Send delete notification for IKEv1 phase 1 removal
Context	configure ipsec ike-policy <i>number</i> ike-version-1 ph1-responder-delete-notify <i>boolean</i>
Tree	ph1-responder-delete-notify
Description	When configured to true , a delete notification is sent to the peer when deleting an IKEv1 phase 1 SA for which it was the responder. When configured to false , no notification is sent.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-version-2

Synopsis	Enter the ike-version-2 context
Context	configure ipsec ike-policy <i>number</i> ike-version-2
Tree	ike-version-2
Description	Commands in this context configure the IKE version 2 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: ike-version-1 or ike-version-2 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-version-2 auth-method <i>keyword</i>
Tree	auth-method
Options	psk, cert, psk-radius, cert-radius, eap, auto-eap-radius, auto-eap, psk-or-cert
Default	psk
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-eap-method *keyword*

Synopsis	Authentication method used for the remote peer
Context	configure ipsec ike-policy <i>number</i> ike-version-2 auto-eap-method <i>keyword</i>
Tree	auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the remote peer.
Options	psk, cert, psk-or-cert
Default	cert
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ikev2-fragment

Synopsis	Enable the ikev2-fragment context
Context	configure ipsec ike-policy number ike-version-2 ikev2-fragment
Tree	ikev2-fragment
Description	Commands in this context configure IKEv2 protocol level fragmentation (RFC 7383).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mtu number

Synopsis	Maximum size of the IKEv2 packet
Context	configure ipsec ike-policy number ike-version-2 ikev2-fragment mtu number
Tree	mtu
Range	512 to 9000
Units	octets
Default	1500
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reassemble-timeout number

Synopsis	Timeout for reassembly of IKEv2 message fragments
Context	configure ipsec ike-policy number ike-version-2 ikev2-fragment reassemble-timeout number
Tree	reassemble-timeout
Range	1 to 5
Units	seconds
Default	2
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

own-auth-method keyword

Synopsis	Authentication method for IKE policy on its own side
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Context	configure ipsec ike-policy <i>number</i> ike-version-2 own-auth-method <i>keyword</i>
Tree	own-auth-method
Options	symmetric, psk, cert, eap-only, follow-peer
Default	symmetric
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

own-auto-eap-method *keyword*

Synopsis	Authentication method used on its own side
Context	configure ipsec ike-policy <i>number</i> ike-version-2 own-auto-eap-method <i>keyword</i>
Tree	own-auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the peer.
Options	psk, cert
Default	cert
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk-required *boolean*

Synopsis	Force the use of PPK
Context	configure ipsec ike-policy <i>number</i> ike-version-2 ppk-required <i>boolean</i>
Tree	ppk-required
Description	When configured to true , the router is forced to use PPKs for the IKEv2 key derivation process. When configured to false , PPK use is optional, and the router can fall back to derive keys without PPK.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

send-idr-after-eap-success *boolean*

Synopsis	Send IDr payload in last IKE authentication response
Context	configure ipsec ike-policy <i>number</i> ike-version-2 send-idr-after-eap-success <i>boolean</i>

Tree	send-idr-after-eap-success
Description	When configured to true , the Identification Responder (IDr) payload is added in the last IKE authentication response after an Extensible Authentication Protocol (EAP) Success packet is received. When configured to false , the IDr payload is not included in the last IKE.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-lifetime *number*

Synopsis	Lifetime of the Phase 2 IKE key
Context	configure ipsec ike-policy <i>number</i> ipsec-lifetime <i>number</i>
Tree	ipsec-lifetime
Range	1200 to 31536000
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

limit-init-exchange

Synopsis	Enter the limit-init-exchange context
Context	configure ipsec ike-policy <i>number</i> limit-init-exchange
Tree	limit-init-exchange
Description	Commands in this context limit the number of ongoing IKEv2 initial exchanges per tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of limiting initial IKE exchanges
Context	configure ipsec ike-policy <i>number</i> limit-init-exchange admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reduced-max-exchange-timeout (*number* | *keyword*)

Synopsis	Maximum timeout for in-progress initial IKE exchange
Context	configure ipsec ike-policy <i>number</i> limit-init-exchange reduced-max-exchange-timeout (<i>number</i> <i>keyword</i>)
Tree	reduced-max-exchange-timeout
Description	This command configures the maximum timeout for the in-progress initial IKE exchange. If a new IKEv2 IKE_SA_INIT request is received when there is an ongoing IKEv2 initial exchange from the same peer, the timeout value of the existing exchange is set to this specified value. If the none option is configured for this command, the timeout value remains unchanged.
Range	2 to 60
Units	seconds
Options	none
Default	2
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lockout

Synopsis	Enable the lockout context
Context	configure ipsec ike-policy <i>number</i> lockout
Tree	lockout
Description	Commands in this context specify the lockout mechanism for the IPsec tunnel. These commands apply only when the system acts as a tunnel responder.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

block (*number* | *keyword*)

Synopsis	Time a client is blocked for failed authentications
Context	configure ipsec ike-policy <i>number</i> lockout block (<i>number</i> <i>keyword</i>)

Tree	block
Description	This command configures the time the client is blocked if the number of failed authentications exceeds the configured value within the specified duration.
Range	1 to 1440
Units	minutes
Options	infinite
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

duration *number*

Synopsis	Time interval for failed attempts threshold
Context	configure ipsec ike-policy <i>number</i> lockout duration <i>number</i>
Tree	duration
Description	This command specifies the time interval in which the configured failed authentication count must be exceeded to trigger a lockout.
Range	1 to 60
Units	minutes
Default	5
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

failed-attempts *number*

Synopsis	Maximum failed authentications allowed in the duration
Context	configure ipsec ike-policy <i>number</i> lockout failed-attempts <i>number</i>
Tree	failed-attempts
Range	1 to 64
Default	3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-port-per-ip *number*

Synopsis	Maximum number of ports allowed under same IP address
Context	configure ipsec ike-policy <i>number</i> lockout max-port-per-ip <i>number</i>
Tree	max-port-per-ip
Description	This command configures the maximum number of ports allowed under the same IP address. When the threshold is exceeded and the client is locked out, all ports behind the IP address are blocked.
Range	1 to 32000
Default	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

match-peer-id-to-cert *boolean*

Synopsis	Check IKE peer ID during certificate authentication
Context	configure ipsec ike-policy <i>number</i> match-peer-id-to-cert <i>boolean</i>
Tree	match-peer-id-to-cert
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-traversal

Synopsis	Enable the nat-traversal context
Context	configure ipsec ike-policy <i>number</i> nat-traversal
Tree	nat-traversal
Description	Commands in this context configure the Network Address Translation Traversal (NAT-T) functionality.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

force *boolean*

Synopsis	Enable NAT-T in forced mode
Context	configure ipsec ike-policy <i>number</i> nat-traversal force <i>boolean</i>

Tree	force
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

force-keep-alive *boolean*

Synopsis	Continue sending keepalive packets (no expiry)
Context	configure ipsec ike-policy <i>number</i> nat-traversal force-keep-alive <i>boolean</i>
Tree	force-keep-alive
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keep-alive-interval *number*

Synopsis	Keepalive interval for NAT-T
Context	configure ipsec ike-policy <i>number</i> nat-traversal keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Range	120 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pfs

Synopsis	Enable the pfs context
Context	configure ipsec ike-policy <i>number</i> pfs
Tree	pfs
Description	Commands in this context configure perfect forward secrecy (PFS) on the IPsec tunnel using the policy. PFS provides for a new key exchange each time the Security Association (SA) key is renegotiated.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	configure ipsec ike-policy <i>number</i> pfs dh-group <i>keyword</i>
Tree	dh-group
Description	This command configures which DH group to use for calculating session keys. More bits provide a higher level of security, but require more processing.
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-14
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

relay-unsolicited-cfg-attribute

Synopsis	Enter the relay-unsolicited-cfg-attribute context
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute
Tree	relay-unsolicited-cfg-attribute
Description	Commands in this context configure attributes returned from the source (such as a RADIUS server) that are returned to the IKEv2 remote-access tunnel client regardless if the client has requested the attribute in the CFG_REQUEST payload.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

internal-ip4-address *boolean*

Synopsis	Return the IPv4 address from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-address <i>boolean</i>
Tree	internal-ip4-address
Description	When configured to true , the system returns the IPv4 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

internal-ip4-dns *boolean*

Synopsis	Return IPv4 DNS server address from source to client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-dns <i>boolean</i>
Tree	internal-ip4-dns
Description	When configured to true , the system returns the IPv4 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

internal-ip4-netmask *boolean*

Synopsis	Return the IPv4 netmask from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-netmask <i>boolean</i>
Tree	internal-ip4-netmask
Description	When configured to true , the system returns the IPv4 netmask from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the netmask in the CFG_REQUEST payload.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

internal-ip6-address *boolean*

Synopsis	Return the IPv6 address from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip6-address <i>boolean</i>
Tree	internal-ip6-address
Description	When configured to true , the system returns the IPv6 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

internal-ip6-dns *boolean*

Synopsis Return IPv6 DNS server address from source to client

Context **configure** [ipsec ike-policy](#) *number* [relay-unsolicited-cfg-attribute internal-ip6-dns](#) *boolean*

Tree [internal-ip6-dns](#)

Description When configured to **true**, the system returns the IPv6 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-transform [[id](#)] *number*

Synopsis Enter the **ike-transform** list instance

Context **configure** [ipsec ike-transform](#) *number*

Tree [ike-transform](#)

Max. instances 4096

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis IKE transform instance ID

Context **configure** [ipsec ike-transform](#) *number*

Tree [ike-transform](#)

Range 1 to 4096

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dh-group keyword

Synopsis	Key exchange group to derive IKE_SA and CHILD_SA keys
Context	configure ipsec ike-transform <i>number</i> dh-group <i>keyword</i>
Tree	dh-group
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-14
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-auth-algorithm keyword

Synopsis	IKE authentication algorithm for IKE transform instance
Context	configure ipsec ike-transform <i>number</i> ike-auth-algorithm <i>keyword</i>
Tree	ike-auth-algorithm
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-256
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-encryption-algorithm keyword

Synopsis	IKE encryption algorithm for the IKE transform instance
Context	configure ipsec ike-transform <i>number</i> ike-encryption-algorithm <i>keyword</i>
Tree	ike-encryption-algorithm
Options	des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm16, aes256-gcm8, aes256-gcm16
Default	aes-128
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-prf-algorithm keyword

Synopsis	PRF algorithm for the IKE transform instance
Context	configure ipsec ike-transform <i>number</i> ike-prf-algorithm <i>keyword</i>

Tree	ike-prf-algorithm
Description	This command specifies the pseudo-random function algorithm used for IKE security association. If an encrypted algorithm such as AES-GCM is used for the IKE encryption algorithm, same-as-auth cannot be used for the IKE PRF algorithm.
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, same-as-auth
Default	same-as-auth
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isakmp-lifetime *number*

Synopsis	Phase 1 lifetime for the IKE transform instance
Context	configure ipsec ike-transform <i>number</i> isakmp-lifetime <i>number</i>
Tree	isakmp-lifetime
Range	1200 to 31536000
Units	seconds
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform [[id](#)] *number*

Synopsis	Enter the ipsec-transform list instance
Context	configure ipsec ipsec-transform <i>number</i>
Tree	ipsec-transform
Description	Commands in this context create an IPsec transform policy. IPsec transform policies can be shared. A change to the IPsec transform is allowed at any time. The change does not impact tunnels that have been established until they are renegotiated. If the change is required immediately, the tunnel must be cleared (reset) for force renegotiation.
Max. instances	2048
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] number

Synopsis	IPsec transform policy ID
Context	configure ipsec ipsec-transform <i>number</i>
Tree	ipsec-transform
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp-auth-algorithm keyword

Synopsis	Encapsulating Security Payload (ESP) authentication
Context	configure ipsec ipsec-transform <i>number</i> esp-auth-algorithm <i>keyword</i>
Tree	esp-auth-algorithm
Description	This command specifies the hashing algorithm used for the authentication function. Both ends of a manually configured tunnel must share the same configuration for the IPsec tunnel to enter the operational state.
Options	null, md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-256
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp-encryption-algorithm keyword

Synopsis	Encryption algorithm for the IPsec transform session
Context	configure ipsec ipsec-transform <i>number</i> esp-encryption-algorithm <i>keyword</i>
Tree	esp-encryption-algorithm
Description	<p>This command configures the encryption used for the CHILD_SA.</p> <p>Both ends of a manually configured tunnel must share the same encryption algorithm for the IPsec tunnel to enter the operational state.</p> <p>When AES-GCM or AES-GMAC is configured:</p> <ul style="list-style-type: none"> the authentication encryption must be set to auth-encryption the system does not include the authentication algorithm in the ESP proposal of the SA payload IPsec transform cannot be used for manual keying

Options	null, des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm12, aes128-gcm16, aes192-gcm8, aes192-gcm12, aes192-gcm16, aes256-gcm8, aes256-gcm12, aes256-gcm16, null-aes128-gmac, null-aes192-gmac, null-aes256-gmac
Default	aes-128
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

extended-sequence-number *boolean*

Synopsis	Enable extended sequence numbering support
Context	configure ipsec ipsec-transform <i>number</i> extended-sequence-number <i>boolean</i>
Tree	extended-sequence-number
Description	When configured to true , the router supports 64-bit extended sequence numbering. This numbering is used for high throughput CHILD_SA to avoid frequent re-keying caused by sequence numbering wrap around. When configured to false , the router only supports 32-bit sequence numbering.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-lifetime *number*

Synopsis	Phase 2 lifetime for the IPsec transform session
Context	configure ipsec ipsec-transform <i>number</i> ipsec-lifetime <i>number</i>
Tree	ipsec-lifetime
Description	This command configures the lifetime of the Phase 2 IKE key. When unconfigured, the value is inherited from the IPsec lifetime configured in the corresponding IKE policy configured for the same IPsec gateway or IPsec tunnel.
Range	1200 to 31536000
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pfs-dh-group *keyword*

Synopsis	Diffie-Hellman group used for PFS compilation
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Context	configure ipsec ipsec-transform <i>number</i> pfs-dh-group <i>keyword</i>
Tree	pfs-dh-group
Description	This command configures the DH group used for Perfect Forward Secrecy (PFS) compilation during CHILD_SA rekeying. When unconfigured, the value is inherited from the DH group value from the IPsec gateway or IPsec tunnel.
Options	none, group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transport-mode-profile [[name](#)] *named-item*

Synopsis	Enter the ipsec-transport-mode-profile list instance
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i>
Tree	ipsec-transport-mode-profile
Description	Commands in this context configure IPsec-specific attributes that allow an IP tunnel (for example, GRE) to be protected by using IPsec transport mode.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec transport mode profile name string
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i>
Tree	ipsec-transport-mode-profile
Description	This command specifies the name of the IPsec transport mode profile.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> description <i>description</i>

Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

key-exchange

Synopsis	Enter the key-exchange context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange
Tree	key-exchange
Description	Commands in this context configure the key exchange used each time the Security Association (SA) key is renegotiated.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic

Synopsis	Enter the dynamic context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic
Tree	dynamic
Description	Commands in this context configure dynamic keying for the transport mode profile.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish *boolean*

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert

Synopsis	Enter the cert context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify

Synopsis	Enter the status-verify context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result

Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
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Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id

Synopsis	Enter the id context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name*

Synopsis	FQDN used as the local ID IKE type
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic id fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
String length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address*

Synopsis	IPv4 as the local ID type
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic id ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	IPv6 used as the local IKE ID type
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy *reference*

Synopsis	IKE policy ID
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>

Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk

Synopsis	Enter the ppk context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic ppk
Tree	ppk
Description	Commands in this context configure the PPKs to use for dynamic keying of the IPsec tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id reference

Synopsis	PPK ID
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic ppk id reference
Tree	id
Reference	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

list reference

Synopsis	PPK list instance name
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic ppk list reference
Tree	list
Reference	configure ipsec ppk-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf*

Synopsis	Pre-shared key for IKE authentication
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> key-exchange dynamic pre-shared-key encrypted-leaf
Tree	pre-shared-key
Description	This command specifies the pre-shared key for IKE authentication in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp *number*

Synopsis	Maximum number of recent records
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike *number*

Synopsis	Maximum number of historical IKE key records
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Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

replay-window *number*

Synopsis	Anti-replay window size
Context	configure ipsec ipsec-transport-mode-profile <i>named-item</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk-list [[name](#)] *named-item*

Synopsis	Enter the ppk-list list instance
Context	configure ipsec ppk-list <i>named-item</i>
Tree	ppk-list
Description	Commands in this context configure the list of Post-quantum Preshared Keys (PPKs) to use for IKEv2 key derivation, as described in RFC 8784.
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	PPK list instance name
Context	configure ipsec ppk-list <i>named-item</i>
Tree	ppk-list

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk [**ppk-id**] *named-item-64*

Synopsis	Enter the ppk list instance
Context	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Tree	ppk
Description	Commands in this context configure the attributes for a PPK within the list.
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ppk-id] *named-item-64*

Synopsis	PPK ID
Context	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Tree	ppk
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

value

Synopsis	Enable the value context
Context	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i> value
Tree	value
Description	Commands in this context configure the values for the specified PPK.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ascii encrypted-leaf

Synopsis PPK value as an ASCII string

Context **configure** [ipsec ppk-list](#) *named-item* [ppk](#) *named-item-64* [value](#) [ascii](#) *encrypted-leaf*

Tree [ascii](#)

Description This command specifies the PPK value as an ASCII string in a protected format.
The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 166

Notes The following elements are part of a mandatory choice: **ascii** or **hex**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

hex encrypted-leaf-hex

Synopsis PPK value as a hexadecimal string with prefix 0x

Context **configure** [ipsec ppk-list](#) *named-item* [ppk](#) *named-item-64* [value](#) [hex](#) *encrypted-leaf-hex*

Tree [hex](#)

Description This command specifies the PPK value as a hexadecimal string with prefix 0x in a protected format.
The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 166

String format 'encrypted-leaf-hex' must have clear text in hex with prefix 0x or end with hash/hash2/hash3/custom

Notes The following elements are part of a mandatory choice: **ascii** or **hex**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

radius

Synopsis Enter the **radius** context

Context **configure** [ipsec radius](#)

Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

accounting-policy [[name](#)] *named-item*

Synopsis	Enter the accounting-policy list instance
Context	configure ipsec radius accounting-policy <i>named-item</i>
Tree	accounting-policy
Description	Commands in this context configure RADIUS accounting policies to collect accounting statistics.
Max. instances	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	RADIUS accounting policy name
Context	configure ipsec radius accounting-policy <i>named-item</i>
Tree	accounting-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure ipsec radius accounting-policy <i>named-item</i> include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes that are to be included in the RADIUS Authentication-Request messages.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

acct-stats *boolean*

Synopsis Include accounting attributes in RADIUS packets

Context **configure** [ipsec radius accounting-policy](#) *named-item* [include-radius-attribute acct-stats](#) *boolean*

Tree [acct-stats](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

called-station-id *boolean*

Synopsis Include the Called-Station-Id attribute

Context **configure** [ipsec radius accounting-policy](#) *named-item* [include-radius-attribute called-station-id](#) *boolean*

Tree [called-station-id](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

calling-station-id *boolean*

Synopsis Include the Calling-Station-Id attribute

Context **configure** [ipsec radius accounting-policy](#) *named-item* [include-radius-attribute calling-station-id](#) *boolean*

Tree [calling-station-id](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

framed-ip-addr *boolean*

Synopsis Include the Framed-IP-Address attribute

Context	configure ipsec radius accounting-policy <i>named-item</i> include-radius-attribute framed-ip-addr <i>boolean</i>
Tree	framed-ip-addr
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

framed-ipv6-prefix *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	configure ipsec radius accounting-policy <i>named-item</i> include-radius-attribute framed-ipv6-prefix <i>boolean</i>
Tree	framed-ipv6-prefix
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure ipsec radius accounting-policy <i>named-item</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nas-ip-addr *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure ipsec radius accounting-policy <i>named-item</i> include-radius-attribute nas-ip-addr <i>boolean</i>
Tree	nas-ip-addr
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	configure ipsec radius accounting-policy <i>named-item</i> include-radius-attribute nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	configure ipsec radius accounting-policy <i>named-item</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

update-interval

Synopsis	Enter the update-interval context
Context	configure ipsec radius accounting-policy <i>named-item</i> update-interval
Tree	update-interval
Description	Commands in this context determine how RADIUS interim-update packets are sent for IKEv2 remote-access tunnels.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

jitter *number*

Synopsis	Jitter interval for sending each interim-update packet
Context	configure ipsec radius accounting-policy <i>named-item</i> update-interval jitter <i>number</i>
Tree	jitter
Description	This command specifies the jitter interval for the RADIUS interim-update packets.

When unconfigured, the system uses 10% of the update interval value.

Range	0 to 3600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

value *number*

Synopsis	Update interval of the RADIUS accounting data
Context	configure ipsec radius accounting-policy <i>named-item</i> update-interval value <i>number</i>
Tree	value
Description	This command configures the update interval of the RADIUS accounting data. If a value of 0 is configured, no intermediate updates are sent.
Range	0 5 to 259200
Units	minutes
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-policy [[name](#)] *named-item*

Synopsis	Enter the authentication-policy list instance
Context	configure ipsec radius authentication-policy <i>named-item</i>
Tree	authentication-policy
Description	Commands in this context configure the RADIUS authentication policy associated with the IPsec gateway.
Max. instances	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	RADIUS authentication policy name
Context	configure ipsec radius authentication-policy <i>named-item</i>
Tree	authentication-policy

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes to be included in the RADIUS Authentication-Request messages.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client-cert-subject-key-id *boolean*

Synopsis	Include the Subject Key Identifier
Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute client-cert-subject-key-id <i>boolean</i>
Tree	client-cert-subject-key-id
Description	When configured to true , the Subject Key Identifier of the certificate of the peer is included in the RADIUS Access-Request packet as VSA: Alc-Subject-Key-Identifier.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nas-ip-addr *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute nas-ip-addr <i>boolean</i>
Tree	nas-ip-addr
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
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Context	configure ipsec radius authentication-policy <i>named-item</i> include-radius-attribute nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

password *encrypted-leaf*

Synopsis	Password used in RADIUS access requests
Context	configure ipsec radius authentication-policy <i>named-item</i> password <i>encrypted-leaf</i>
Tree	password
Description	This command specifies the password used in RADIUS access requests in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	configure ipsec radius authentication-policy <i>named-item</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

show-ipsec-keys *boolean*

Synopsis	Show IPsec IKE and ESP keys in the output
Context	configure ipsec show-ipsec-keys <i>boolean</i>
Tree	show-ipsec-keys

Description	When configured to true , this command allows IPsec keys to be (optionally) included in the display output of certain debug and admin commands. When configured to false , the key display is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

static-sa [[name](#)] *named-item*

Synopsis	Enter the static-sa list instance
Context	configure ipsec static-sa <i>named-item</i>
Tree	static-sa
Max. instances	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Static SA name
Context	configure ipsec static-sa <i>named-item</i>
Tree	static-sa
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication

Synopsis	Enable the authentication context
Context	configure ipsec static-sa <i>named-item</i> authentication
Tree	authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

algorithm *keyword*

Synopsis	Authentication algorithm used for an IPsec manual SA
Context	configure ipsec static-sa <i>named-item</i> authentication algorithm <i>keyword</i>
Tree	algorithm
Options	md5, sha1
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key *encrypted-leaf*

Synopsis	Key used for the authentication algorithm
Context	configure ipsec static-sa <i>named-item</i> authentication key <i>encrypted-leaf</i>
Tree	key
Description	<p>This command specifies the key used for the authentication algorithm in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 110
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *named-item*

Synopsis	Text description
Context	configure ipsec static-sa <i>named-item</i> description <i>named-item</i>
Tree	description
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction keyword

Synopsis	Direction to which the static SA entry can be applied
Context	configure ipsec static-sa <i>named-item</i> direction <i>keyword</i>
Tree	direction
Options	inbound, outbound, bidirectional
Default	bidirectional
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol keyword

Synopsis	IPsec protocol used with the static SA
Context	configure ipsec static-sa <i>named-item</i> protocol <i>keyword</i>
Tree	protocol
Options	ah, esp
Default	esp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spi number

Synopsis	Security Parameter Index (SPI) for the static SA
Context	configure ipsec static-sa <i>named-item</i> spi <i>number</i>
Tree	spi
Description	<p>This command specifies the SPI for the static SA.</p> <p>When the direction command is set to inbound, the SPI is used to look up the instruction to verify and decrypt the incoming IPsec packets. When the direction command is set to outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p> <p>When unconfigured, the static SA cannot be used.</p>
Range	256 to 16383
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trust-anchor-profile [[name](#)] *named-item*

Synopsis	Enter the trust-anchor-profile list instance
Context	configure ipsec trust-anchor-profile <i>named-item</i>
Tree	trust-anchor-profile
Max. instances	10128
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	Trust anchor profile name for IPsec tunnel or gateway
Context	configure ipsec trust-anchor-profile <i>named-item</i>
Tree	trust-anchor-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor [[ca-profile](#)] *reference*

Synopsis	Add a list entry for trust-anchor
Context	configure ipsec trust-anchor-profile <i>named-item</i> trust-anchor <i>reference</i>
Tree	trust-anchor
Description	Commands in this context configure a CA profile as a trust anchor CA.
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ca-profile] *reference*

Synopsis	Name of the CA profile as a trust anchor profile
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Context	configure ipsec trust-anchor-profile <i>named-item</i> trust-anchor <i>reference</i>
Tree	trust-anchor
Reference	configure system security pki ca-profile <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ts-list [[name](#)] *named-item*

Synopsis	Enter the ts-list list instance
Context	configure ipsec ts-list <i>named-item</i>
Tree	ts-list
Description	Commands in this context configure Traffic Selector (TS) settings.
Max. instances	32768
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	Traffic Selector (TS) list name
Context	configure ipsec ts-list <i>named-item</i>
Tree	ts-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local

Synopsis	Enter the local context
Context	configure ipsec ts-list <i>named-item</i> local
Tree	local

Description	Commands in this context configure a local TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	TS list entry ID
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i>
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address

Synopsis	Enable the address context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> address prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)

Tree	prefix
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range

Synopsis	Enable the range context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> address range
Tree	range
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Lower bound of the IP address range for the entry
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> address range begin (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	begin
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Upper bound of the IP address range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> address range end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

protocol

Synopsis	Enable the protocol context
Context	configure <i>ipsec ts-list</i> <i>named-item</i> <i>local entry</i> <i>number</i> <i>protocol</i>
Tree	<i>protocol</i>
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any

Synopsis	Match any protocol ID
Context	configure <i>ipsec ts-list</i> <i>named-item</i> <i>local entry</i> <i>number</i> <i>protocol</i> <i>any</i>
Tree	<i>any</i>
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id

Synopsis	Enable the id context
Context	configure <i>ipsec ts-list</i> <i>named-item</i> <i>local entry</i> <i>number</i> <i>protocol</i> <i>id</i>
Tree	<i>id</i>
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp

Synopsis	Enter the icmp context
Context	configure <i>ipsec ts-list</i> <i>named-item</i> <i>local entry</i> <i>number</i> <i>protocol</i> <i>id</i> <i>icmp</i>
Tree	<i>icmp</i>
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis Support OPAQUE ports

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id icmp opaque**

Tree **opaque**

Description This command allows the protocol ID to be accepted even when the port information is not available.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis Enable the **port-range** context

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id icmp port-range**

Tree **port-range**

Description Commands in this context configure port range information for the protocol.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-code *number*

Synopsis Lower bound of the ICMP code range

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id icmp port-range begin-icmp-code** *number*

Tree **begin-icmp-code**

Range 0 to 255

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp port-range begin-icmp-type <i>number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp port-range end-icmp-code <i>number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp port-range end-icmp-type <i>number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6

Synopsis	Enter the icmp6 context
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Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6
Tree	icmp6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6 port-range begin-icmp-code <i>number</i>
Tree	begin-icmp-code
Range	0 to 255

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6 port-range begin-icmp-type <i>number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6 port-range end-icmp-code <i>number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id icmp6 port-range end-icmp-type <i>number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mipv6

Synopsis Enter the **mipv6** context

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id** **mipv6**

Tree **mipv6**

Notes The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mipv6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis Support OPAQUE ports

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id** **mipv6 opaque**

Tree **opaque**

Description This command allows the protocol ID to be accepted even when the port information is not available.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis Enable the **port-range** context

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id** **mipv6 port-range**

Tree **port-range**

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis Lower bound of the port range

Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id mipv6 port-range begin <i>number</i>
Tree	begin
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id mipv6 port-range end <i>number</i>
Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

protocol-id-with-any-port (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id protocol-id-with-any-port (<i>keyword</i> <i>number</i>)
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

sctp

Synopsis	Enter the sctp context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id sctp

Tree	sctp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id sctp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id sctp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id sctp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis Upper bound of the port range

Context **configure** [ipsec ts-list](#) *named-item* [local entry](#) *number* [protocol id](#) [sctp port-range](#) [end number](#)

Tree [end](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tcp

Synopsis Enter the **tcp** context

Context **configure** [ipsec ts-list](#) *named-item* [local entry](#) *number* [protocol id](#) [tcp](#)

Tree [tcp](#)

Notes The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mip6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis Support OPAQUE ports

Context **configure** [ipsec ts-list](#) *named-item* [local entry](#) *number* [protocol id](#) [tcp opaque](#)

Tree [opaque](#)

Description This command allows the protocol ID to be accepted even when the port information is not available.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id tcp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id tcp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id tcp port-range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

udp

Synopsis	Enter the udp context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id udp

Tree	udp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id udp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id udp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> local entry <i>number</i> protocol id udp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis Upper bound of the port range

Context **configure ipsec ts-list** *named-item* **local entry** *number* **protocol id udp port-range end number**

Tree **end**

Range 0 to 65535

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote

Synopsis Enter the **remote** context

Context **configure ipsec ts-list** *named-item* **remote**

Tree **remote**

Description Commands in this context configure a remote TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [id] number

Synopsis Enter the **entry** list instance

Context **configure ipsec ts-list** *named-item* **remote entry** *number*

Tree **entry**

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] number

Synopsis TS list entry ID

Context **configure ipsec ts-list** *named-item* **remote entry** *number*

Tree **entry**

Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address

Synopsis	Enable the address context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> address prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range

Synopsis	Enable the range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> address range
Tree	range
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Lower bound of the IP address range for the entry
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Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> address range begin (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	begin
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Upper bound of the IP address range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> address range end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

protocol

Synopsis	Enable the protocol context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol
Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any

Synopsis	Match any protocol ID
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol any
Tree	any
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id

Synopsis	Enable the id context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id
Tree	id
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp

Synopsis	Enter the icmp context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp
Tree	icmp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp port-range
Tree	port-range

Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp port-range begin-icmp-code <i>number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp port-range begin-icmp-type <i>number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp port-range end-icmp-code <i>number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp port-range end-icmp-type <i>number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6

Synopsis	Enter the icmp6 context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6
Tree	icmp6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6 port-range begin-icmp-code <i>number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6 port-range begin-icmp-type <i>number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
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Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6 port-range end-icmp-code <i>number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id icmp6 port-range end-icmp-type <i>number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mipv6

Synopsis	Enter the mipv6 context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id mipv6
Tree	mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id mipv6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.

Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id mipv6 port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin number

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id mipv6 port-range begin <i>number</i>
Tree	begin
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id mipv6 port-range end <i>number</i>
Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

protocol-id-with-any-port (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id protocol-id-with-any-port (<i>keyword</i> <i>number</i>)
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

sctp

Synopsis	Enter the sctp context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id sctp
Tree	sctp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id sctp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id sctp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id sctp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id sctp port-range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tcp

Synopsis	Enter the tcp context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id tcp

Tree	tcp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id tcp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id tcp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id tcp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end number

Synopsis Upper bound of the port range

Context **configure** *ipsec ts-list named-item remote entry number protocol id tcp port-range end number*

Tree *end*

Range 0 to 65535

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

udp

Synopsis Enter the **udp** context

Context **configure** *ipsec ts-list named-item remote entry number protocol id udp*

Tree *udp*

Notes The following elements are part of a mandatory choice: **icmp**, **icmp6**, **mip6**, **protocol-id-with-any-port**, **sctp**, **tcp**, or **udp**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

opaque

Synopsis Support OPAQUE ports

Context **configure** *ipsec ts-list named-item remote entry number protocol id udp opaque*

Tree *opaque*

Description This command allows the protocol ID to be accepted even when the port information is not available.

Notes The following elements are part of a choice: **opaque** or **port-range**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id udp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id udp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>named-item</i> remote entry <i>number</i> protocol id udp port-range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-template [*id*] *number*

Synopsis	Enter the tunnel-template list instance
Context	configure ipsec tunnel-template <i>number</i>

Tree	tunnel-template
Max. instances	2048
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	Tunnel template ID
Context	configure ipsec tunnel-template <i>number</i>
Tree	tunnel-template
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

clear-df-bit *boolean*

Synopsis	Clear the Do-not-Fragment (DF) bit
Context	configure ipsec tunnel-template <i>number</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

copy-traffic-class-upon-decapsulation *boolean*

Synopsis	Enable traffic class copy upon decapsulation
Context	configure ipsec tunnel-template <i>number</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	<p>When configured to true, the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).</p> <p>When configured to false, the system does not copy the traffic class from the outer IP packet to the payload IP packet header upon decapsulation.</p>
Default	false

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure ipsec tunnel-template <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number*

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure ipsec tunnel-template <i>number</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	octets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-generation

Synopsis	Enter the icmp-generation context
Context	configure ipsec tunnel-template <i>number</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required

Synopsis	Enter the frag-required context
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of sending ICMP messages
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

Synopsis	Interval for sending ICMP messages
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation

Synopsis	Enter the icmp6-generation context
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation
Tree	icmp6-generation
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pkt-too-big

Synopsis	Enter the pkt-too-big context
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big
Tree	pkt-too-big
Description	Commands in this context configure values for the ICMPv6 Packet Too Big (PTB) messages. The system sends PTB messages if an IPv6 packet is received on the private side that is larger than 1280 bytes and also exceeds the private MTU of the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

Synopsis	Maximum interval during which PTB messages can be sent
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

Synopsis	Max ICMPv6 messages that can be sent during interval
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big message-count <i>number</i>
Tree	message-count
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ignore-default-route *boolean*

Synopsis	Ignore any full range traffic selector in TSi
Context	configure ipsec tunnel-template <i>number</i> ignore-default-route <i>boolean</i>
Tree	ignore-default-route
Description	When configured to true , any full range traffic selector is ignored when creating a reverse route. When configured to false , no CHILD_SA is created if any full range traffic selector is included in TSi.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number*

Synopsis	Maximum size of the IP MTU for the payload packets
Context	configure ipsec tunnel-template <i>number</i> ip-mtu <i>number</i>
Tree	ip-mtu
Range	512 to 9000
Units	octets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*

Synopsis	IPsec transform ID for the tunnel template
Context	configure ipsec tunnel-template <i>number</i> ipsec-transform <i>reference</i>
Tree	ipsec-transform
Reference	configure ipsec ipsec-transform <i>number</i>
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pmtu-discovery-aging *number*

Synopsis	Aging out time of the learned path MTU
Context	configure ipsec tunnel-template <i>number</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk-list *reference*

Synopsis	PPK list to use in the tunnel template
Context	configure ipsec tunnel-template <i>number</i> ppk-list <i>reference</i>
Tree	ppk-list
Description	This command specifies the PPK list to use in the tunnel template, which represents a list of PPKs available for the IPsec gateway. The actual PPK to use depends on the tunnel initiator.
Reference	configure ipsec ppk-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number*

Synopsis	New TCP MSS value on the private side
Context	configure ipsec tunnel-template <i>number</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	<p>This command specifies the new (adjusted) TCP MSS value of TCP SYN packets on the private side.</p> <p>When unconfigured, the MSS value is derived from the received TCP SYN packet on the private side.</p>
Range	512 to 9000
Units	octets

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean*

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure ipsec tunnel-template <i>number</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean*

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure ipsec tunnel-template <i>number</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)

Synopsis	New TCP MSS value on the public side
Context	configure ipsec tunnel-template <i>number</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	<p>This command specifies the new (adjusted) TCP MSS value for the TCP traffic in an IPsec tunnel which is sent from the public network to the private network. The system can use this value to adjust or insert the MSS option in the TCP SYN packet.</p> <p>When unconfigured, the MSS value is derived from the public MTU and IPsec overhead.</p>
Range	512 to 9000
Units	octets

Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

replay-window *number*

Synopsis	Anti-replay window size for the tunnel template
Context	configure ipsec tunnel-template <i>number</i> replay-window <i>number</i>
Tree	replay-window
Range	32 64 128 256 512
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reverse-route

Synopsis	Enter the reverse-route context
Context	configure ipsec tunnel-template <i>number</i> reverse-route
Tree	reverse-route
Description	Commands in this context configure the dynamic LAN-to-LAN (DL2L) tunnel reverse-route options for the tunnel template.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

metric *number*

Synopsis	Metric used for DL2L tunnel reverse routes
Context	configure ipsec tunnel-template <i>number</i> reverse-route metric <i>number</i>
Tree	metric
Description	This command configures the metric for reverse routes. The system uses the metric when selecting a route to install in the route table.
Range	0 to 65535
Default	0
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

preference *number*

Synopsis	Preference used for DL2L tunnel reverse routes
Context	configure ipsec tunnel-template <i>number</i> reverse-route preference <i>number</i>
Tree	preference
Description	This command specifies the route preference assigned to the DL2L tunnel reverse route. The system uses the preference when selecting a route to install in the route table.
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

sp-reverse-route *keyword*

Synopsis	Reverse route creation method in private service
Context	configure ipsec tunnel-template <i>number</i> sp-reverse-route <i>keyword</i>
Tree	sp-reverse-route
Description	This command allows the system to automatically create a reverse route based on dynamic LAN-to-LAN tunnel's TSi in private service.
Options	none, use-security-policy
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

4.12 isa commands

```

configure
- isa
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - log
      - suppress-lsn-events boolean
      - suppress-lsn-sub-blocks-free boolean
  - mda slot-mda
  - redundancy
    - active-mda-limit number
    - intra-chassis
      - active-standby
  - tunnel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - backup slot-mda
    - description description
    - ipsec-responder-only boolean
    - isa-scale-mode keyword
    - multi-active
      - active-isa-number number
      - isa slot-mda
      - member-pool reference
    - primary slot-mda
    - reassembly
      - max-wait-time number
    - stats-collection
      - isa-dp-cpu-usage boolean
  - tunnel-member-pool named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - isa slot-mda

```

4.12.1 isa command descriptions

isa

Synopsis	Enter the isa context
Context	configure isa
Tree	isa
Description	Commands in this context configure the ISA.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat-group [[id](#)] *number*

Synopsis	Enter the nat-group list instance
Context	configure isa nat-group <i>number</i>
Tree	nat-group
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[\[id\]](#) *number*

Synopsis	NAT group ID
Context	configure isa nat-group <i>number</i>
Tree	nat-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the NAT group
Context	configure isa nat-group <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure isa nat-group <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

log

Synopsis	Enter the log context
Context	configure isa nat-group <i>number</i> log
Tree	log
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-lsn-events *boolean*

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	configure isa nat-group <i>number</i> log suppress-lsn-events <i>boolean</i>
Tree	suppress-lsn-events
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

suppress-lsn-sub-blocks-free *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	configure <i>isa nat-group number</i> log suppress-lsn-sub-blocks-free <i>boolean</i>
Tree	suppress-lsn-sub-blocks-free
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mda [[mda-id](#)] *slot-mda*

Synopsis	Add a list entry for mda
Context	configure <i>isa nat-group number</i> mda <i>slot-mda</i>
Tree	mda
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[mda-id] *slot-mda*

Synopsis	MDA ID for ISA NAT group
Context	configure <i>isa nat-group number</i> mda <i>slot-mda</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

redundancy

Synopsis	Enter the redundancy context
Context	configure <i>isa nat-group number</i> redundancy
Tree	redundancy
Description	Commands in this context configure intra-chassis redundancy mode for the NAT group.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

active-mda-limit *number*

- **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.
- **WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of active ESA-VM or ISA members in the NAT group
Context	configure <i>isa nat-group number redundancy active-mda-limit number</i>
Tree	<i>active-mda-limit</i>
Description	<p>This command configures the number of active ESA-VM or ISA members in a NAT group.</p> <p>The system automatically selects which ESA-VMs or ISAs are active. In active/standby (A/S) redundancy mode, the correlation between ESA-VM or ISA members is direct, meaning each ESA-VM or ISA equates to one member. In active/active (A/A) redundancy mode, an individual ESA-VM or ISA may be associated with multiple members.</p> <p>For A/S redundancy, any surplus ESA-VMs or ISAs beyond the configured active threshold automatically transition to standby. These standby units remain idle until an active unit fails, at which point a standby unit takes over, handling traffic from only one failed active unit. This setup allows for the configuration of multiple standby units to provide resilience against several concurrent failures.</p> <p>In A/A redundancy, the combination of this command and the failed-mda-limit command guides the distribution of resources among ESA-VMs or ISAs, essentially defining how the members are structured.</p> <p>In both A/S and A/A modes, the system strives to maintain the configured number of active members as outlined by the active MDA limit, drawing from the pool of available spare resources to compensate for any failures. If the actual number of active members drops below this limit because of a lack of available spares, the NAT group status changes to degraded. In this state, traffic intended for the missing ESA-VM or ISA members (up to the active MDA limit) is blackholed. In Layer 2-aware NAT this condition can be circumvented where traffic can bypass NAT altogether and be directly routed within the internal network that may have an alternate path to a backup NAT system.</p>
Range	1 to 28
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

intra-chassis

Synopsis	Enter the intra-chassis context
----------	--

Context	configure isa nat-group <i>number</i> redundancy intra-chassis
Tree	intra-chassis
Notes	The following elements are part of a choice: inter-chassis or intra-chassis .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

active-standby



WARNING:

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



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Active-standby intra-chassis NAT redundancy model
Context	configure isa nat-group <i>number</i> redundancy intra-chassis active-standby
Tree	active-standby
Notes	The following elements are part of a choice: active-active , active-standby , or l2aware-bypass .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-group [*id*] *number*

Synopsis	Enter the tunnel-group list instance
Context	configure isa tunnel-group <i>number</i>
Tree	tunnel-group
Description	Commands in this context create or edit a tunnel group. A tunnel group is a set of one or more MS-ISAs that support the origination and termination of IPsec and IP/GRE tunnels.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[*id*] *number*

Synopsis	Tunnel group ID
Context	configure isa tunnel-group <i>number</i>

Tree	tunnel-group
Range	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the ISA tunnel group
Context	configure isa tunnel-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

backup *slot-mda*

Synopsis	IPsec module configured in the slot to the IPsec group
Context	configure isa tunnel-group <i>number</i> backup <i>slot-mda</i>
Tree	backup
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure isa tunnel-group <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-responder-only *boolean***WARNING:**

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

Synopsis	Act as an IKE responder except upon MC-IPsec switchover
Context	configure <i>isa tunnel-group number ipsec-responder-only boolean</i>
Tree	<i>ipsec-responder-only</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isa-scale-mode *keyword***WARNING:**

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

Synopsis	Tunnel limit on each ISA for the tunnel group
Context	configure <i>isa tunnel-group number isa-scale-mode keyword</i>
Tree	<i>isa-scale-mode</i>
Options	tunnel-limit-2k, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-8, tunnel-limit-32, tunnel-limit-4k
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-active

Synopsis	Enable the multi-active context
Context	configure <i>isa tunnel-group number multi-active</i>
Tree	<i>multi-active</i>
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

active-isa-number *number***WARNING:**

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

Synopsis	Number of active MS-ISAs in the tunnel group
Context	configure isa tunnel-group <i>number</i> multi-active active-isa-number <i>number</i>
Tree	active-isa-number
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isa [[isa-id](#)] *slot-mda*

Synopsis	Add a list entry for isa
Context	configure isa tunnel-group <i>number</i> multi-active isa <i>slot-mda</i>
Tree	isa
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[isa-id] *slot-mda*

Synopsis	ISA ID associated with the tunnel member pool
Context	configure isa tunnel-group <i>number</i> multi-active isa <i>slot-mda</i>
Tree	isa
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

member-pool *reference*

Synopsis	Tunnel-member pool name
Context	configure isa tunnel-group <i>number</i> multi-active member-pool <i>reference</i>

Tree	member-pool
Reference	configure isa tunnel-member-pool <i>named-item</i>
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary slot-mda

Synopsis	Primary ISA IPsec module assigned for the tunnel group
Context	configure isa tunnel-group <i>number</i> primary slot-mda
Tree	primary
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reassemble

Synopsis	Enter the reassemble context
Context	configure isa tunnel-group <i>number</i> reassemble
Tree	reassemble
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-wait-time number

Synopsis	Maximum time to receive fragments for packet reassembly
Context	configure isa tunnel-group <i>number</i> reassemble max-wait-time <i>number</i>
Tree	max-wait-time
Range	1 to 5000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

stats-collection

Synopsis	Enter the stats-collection context
Context	configure isa tunnel-group <i>number</i> stats-collection
Tree	stats-collection
Description	Commands in this context configure the ISA statistics collection.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isa-dp-cpu-usage *boolean*

Synopsis	Collect statistics used to derive ISA DP CPU usage
Context	configure isa tunnel-group <i>number</i> stats-collection isa-dp-cpu-usage <i>boolean</i>
Tree	isa-dp-cpu-usage
Description	When configured to true , this command collects statistics used to derive ISA CPU DP usage and impacts the ISA performance. When configured to false , statistics are not collected.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-member-pool [[name](#)] *named-item*

Synopsis	Enter the tunnel-member-pool list instance
Context	configure isa tunnel-member-pool <i>named-item</i>
Tree	tunnel-member-pool
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[[name](#)] *named-item*

Synopsis	ISA tunnel-member pool name
Context	configure isa tunnel-member-pool <i>named-item</i>
Tree	tunnel-member-pool
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure isa tunnel-member-pool <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isa [[isa-id](#)] *slot-mda*

Synopsis	Add a list entry for isa
Context	configure isa tunnel-member-pool <i>named-item</i> isa <i>slot-mda</i>
Tree	isa
Max. instances	16
Notes	The following elements are part of a choice: esa or isa .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[isa-id] *slot-mda*

Synopsis	ISA ID associated with the tunnel member pool
Context	configure isa tunnel-member-pool <i>named-item</i> isa <i>slot-mda</i>
Tree	isa
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

4.13 lag commands

```

configure
- lag lag-interface
- access
- adapt-qos
- include-egr-hash-cfg boolean
- mode keyword
- bandwidth number
- booking-factor number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bandwidth-threshold
- action keyword
- cost number
- value number
- description very-long-description
- dynamic-cost boolean
- encap-type keyword
- hash-weight-threshold
- action keyword
- cost number
- value number
- hold-time-down number
- lacp
- administrative-key number
- fallback
- mode keyword
- timeout number
- mode keyword
- system-id mac-address
- system-priority number
- lacp-mux-control keyword
- lacp-xmit-interval keyword
- lacp-xmit-stdby boolean
- lldp-member-template
- dest-mac keyword
- apply-groups reference
- apply-groups-exclude reference
- notification boolean
- port-id-subtype keyword
- receive boolean
- transmit boolean
- tunnel-nearest-bridge boolean
- tunnel-nearest-customer boolean
- tunnel-nearest-non-tpmr boolean
- tx-mgmt-address keyword
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- tx-tlvs
- port-desc boolean
- sys-cap boolean
- sys-desc boolean
- sys-name boolean
- mac-address mac-address
- max-ports number
- mode keyword
- monitor-oper-group reference
- port reference

```

configure lag port apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **hash-weight** (*number* | *keyword*)
- **priority** *number*
- **sub-group** (*number* | *keyword*)
- **port-threshold**
 - **action** *keyword*
 - **cost** *number*
 - **value** *number*
- **port-type** *keyword*
- **ptp-timestamping**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-address** *ipv4-address*
 - **ipv6-address** *ipv6-address*
- **selection-criteria**
 - **mode** *keyword*
 - **slave-to-partner** *boolean*
 - **subgroup-hold-time** (*number* | *keyword*)
- **standby-signaling** *keyword*

4.13.1 lag command descriptions

lag [**lag-name**] *lag-interface*

Synopsis	Enter the lag list instance
Context	configure lag <i>lag-interface</i>
Tree	lag
Description	Commands in this context configure the Link Aggregation Group (LAG) attributes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] *lag-interface*

Synopsis	LAG name
Context	configure lag <i>lag-interface</i>
Tree	lag
Description	This command configures a LAG name or ID. The LAG name or ID must start with "lag-" followed by the lag name or ID, for example, <i>lag-newyork-to-boston</i> or <i>lag-700</i> .
String length	1 to 27
String format	'lag-interface' must be lag- followed by number 1-800 or up to 23 chars (e.g. lag-1 or lag-my-lag)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access

Synopsis	Enter the access context
Context	configure lag <i>lag-interface</i> access
Tree	access
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adapt-qos

Synopsis	Enter the adapt-qos context
Context	configure lag lag-interface access adapt-qos
Tree	adapt-qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-egr-hash-cfg *boolean*

Synopsis	Factor egress hashing into buffer and rate distribution
Context	configure lag lag-interface access adapt-qos include-egr-hash-cfg <i>boolean</i>
Tree	include-egr-hash-cfg
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	QoS adaptation mode
Context	configure lag lag-interface access adapt-qos mode <i>keyword</i>
Tree	mode
Options	link, distribute, port-fair
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	Administrative bandwidth applied to this LAG
Context	configure lag lag-interface access bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	bps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

booking-factor *number*

Synopsis	Booking factor against the administrative bandwidth
Context	configure lag <i>lag-interface</i> access booking-factor <i>number</i>
Tree	booking-factor
Range	1 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LAG
Context	configure lag <i>lag-interface</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth-threshold

Synopsis	Enter the bandwidth-threshold context
Context	configure lag <i>lag-interface</i> bandwidth-threshold
Tree	bandwidth-threshold
Description	Commands in this context configure the behavior for the LAG when the number of operational links changes so that the usable bandwidth of the LAG is equal to or below the bandwidth-threshold level.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action to be taken when LAG operational state changes
Context	configure lag <i>lag-interface</i> bandwidth-threshold action <i>keyword</i>

Tree	action
Description	This command specifies the action that the system takes if the usable bandwidth of the LAG is at or below the threshold value.
Options	down – Specifies the LAG is brought down at threshold dynamic-cost – Specifies dynamic costing is activated static-cost – Specifies static costing is activated
Default	down
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

cost *number*

Synopsis	Static cost of the LAG
Context	configure lag lag-interface bandwidth-threshold cost number
Tree	cost
Description	This command specifies the decimal integer static cost of the LAG.
Range	1 to 16777215
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Integer bandwidth threshold value
Context	configure lag lag-interface bandwidth-threshold value number
Tree	value
Description	This command specifies the bandwidth threshold as a percentage of the total bandwidth for the LAG. When the usable bandwidth is equal to or below the threshold, the system invokes the configured action. If the usable bandwidth exceeds the bandwidth threshold, any action taken for being below the threshold value ceases.
Range	1 to 100
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
----------	------------------

Context	configure lag <i>lag-interface</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-cost *boolean*

Synopsis	Allow LAG costing using operational aggregate bandwidth
Context	configure lag <i>lag-interface</i> dynamic-cost <i>boolean</i>
Tree	dynamic-cost
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encap-type *keyword*



WARNING:

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



WARNING:

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

Synopsis	Encapsulation type
Context	configure lag <i>lag-interface</i> encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-weight-threshold

Synopsis	Enter the hash-weight-threshold context
Context	configure lag <i>lag-interface</i> hash-weight-threshold

Tree	hash-weight-threshold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action when the sum of the hash weight is not exceeded
Context	configure lag <i>lag-interface</i> hash-weight-threshold action <i>keyword</i>
Tree	action
Options	down, dynamic-cost, static-cost
Default	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cost *number*

Synopsis	Static cost of the LAG
Context	configure lag <i>lag-interface</i> hash-weight-threshold cost <i>number</i>
Tree	cost
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Sum of the hash weight values of all active LAG ports
Context	configure lag <i>lag-interface</i> hash-weight-threshold value <i>number</i>
Tree	value
Range	1 to 6400000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time-down *number*

Synopsis	Delay time for reporting the LAG is down
----------	--

Context	configure lag lag-interface hold-time-down number
Tree	hold-time-down
Range	1 to 2000
Units	deciseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP

Synopsis	Enable the lACP context
Context	configure lag lag-interface lACP
Tree	lACP
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

administrative-key *number*

Synopsis	Key to identify the channel group on each LACP port
Context	configure lag lag-interface lACP administrative-key number
Tree	administrative-key
Description	<p>This command configures the administrative key that identifies the channel group on each port configured to use LACP.</p> <p>In an MC-LAG configuration, both redundant nodes must be configured with the same key values. In any other case, the key is only locally significant.</p>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fallback

Synopsis	Enable the fallback context
Context	configure lag lag-interface lACP fallback
Tree	fallback
Description	Commands in this context enable LACP fallback. LACP fallback allows one or more designated links of an LACP-controlled LAG to go into forwarding mode if LACP is not

yet operational after a configured timeout period. Links capable of forwarding traffic assume the Ethernet and IP characteristics configured for the LAG.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis LACP fallback mode
Context **configure** *lag* *lag-interface* *lacp* *fallback mode* *keyword*
Tree *mode*
Description This command configures the LACP fallback mode.
The **static** mode enables a single member to forward traffic during fallback.
Options static
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

Synopsis LACP fallback timeout interval
Context **configure** *lag* *lag-interface* *lacp* *fallback timeout* *number*
Tree *timeout*
Description This command configures the duration after which a link becomes active if no LACP PDUs are received within this timeout period.
Note: The user must first configure this command to a timeout interval of 90 before the **configure lag lacp-xmit-interval** command can change from **fast** to **slow**.
Range 4 to 3600
Units seconds
Default 4
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis Mode in which LACP operates
Context **configure** *lag* *lag-interface* *lacp* *mode* *keyword*

Tree	mode
Options	passive, active
Default	passive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *mac-address*

Synopsis	System ID
Context	configure lag <i>lag-interface</i> lACP system-id <i>mac-address</i>
Tree	system-id
Default	00:00:00:00:00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-priority *number*

Synopsis	System priority value
Context	configure lag <i>lag-interface</i> lACP system-priority <i>number</i>
Tree	system-priority
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP-mux-control *keyword*

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

Synopsis	MUX machine control for LACP LAG in active/passive mode
Context	configure lag <i>lag-interface</i> lACP-mux-control <i>keyword</i>
Tree	lACP-mux-control
Options	coupled, independent
Default	coupled

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP-xmit-interval *keyword*

Synopsis	Time for periodic transmission
Context	configure lag lag-interface lACP-xmit-interval <i>keyword</i>
Tree	lACP-xmit-interval
Options	slow, fast
Default	fast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP-xmit-stdby *boolean*

Synopsis	Allow LACP message transmission on standby links
Context	configure lag lag-interface lACP-xmit-stdby <i>boolean</i>
Tree	lACP-xmit-stdby
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lldp-member-template

Synopsis	Enter the lldp-member-template context
Context	configure lag lag-interface lldp-member-template
Tree	lldp-member-template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-mac [[mac-type](#)] *keyword*

Synopsis	Enter the dest-mac list instance
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i>
Tree	dest-mac

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mac-type] keyword

Synopsis	Destination MAC address type
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i>
Tree	dest-mac
Options	nearest-bridge – Use the nearest bridge nearest-non-tpmr – Use nearest non-Two-Port MAC Relay (TPMR) nearest-customer – Use the nearest customer
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

notification boolean

Synopsis	Enable LLDP notifications
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i> notification <i>boolean</i>
Tree	notification
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id-subtype keyword

Synopsis	Encoding of the Port ID TLV transmitted to the peer
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i> port-id-subtype <i>keyword</i>
Tree	port-id-subtype
Description	This command configures how to encode the Port ID TLV transmitted to the peer. The default setting tx-local (ifindex value) is required by some versions of the NSP NSM-P to properly build the Layer 2 topology map using LLDP. Changing this value to transmit the ifName (tx-if-name) or ifAlias (tx-if-alias) in place of the ifIndex (tx-local) may affect the ability of the NSP NFM-P to build the Layer 2 topology map using LLDP.
Options	tx-if-alias – Transmit the ifAlias String (subtype 1) tx-if-name – Transmit the ifName string (subtype 5)

	tx-local – Transmit the interface ifIndex value (subtype 7)
Default	tx-local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Enable LLDP received frame handling
Context	configure lag <i>lag-interface</i> lldp-member-template dest-mac keyword receive <i>boolean</i>
Tree	receive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit *boolean*

Synopsis	Enable LLDP transmitted frame handling
Context	configure lag <i>lag-interface</i> lldp-member-template dest-mac keyword transmit <i>boolean</i>
Tree	transmit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-nearest-bridge *boolean*

Synopsis	Enable nearest bridge tunneling
Context	configure lag <i>lag-interface</i> lldp-member-template dest-mac keyword tunnel-nearest-bridge <i>boolean</i>
Tree	tunnel-nearest-bridge
Description	<p>When configured to true, this command enables nearest bridge tunneling.</p> <p>This command allows LLDP packets received on the port with the destination address of the nearest bridge to be tunneled without being intercepted on the local port. The dest-mac mac-type nearest-bridge must be disabled for tunneling to occur. This is applicable to NULL SAP Epipe and VPLS services only.</p> <p>When configured to false, nearest bridge tunneling is disabled.</p>
Default	false

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

tunnel-nearest-customer *boolean*

Synopsis Enable nearest customer tunneling

Context **configure** *lag* *lag-interface* *lldp-member-template* *dest-mac* *keyword* **tunnel-nearest-customer** *boolean*

Tree [tunnel-nearest-customer](#)

Description When configured to **true**, the system allows LLDP packets received on the port with the destination address of the nearest customer to be tunneled without being intercepted on the local port.

When configured to **false**, the system disables nearest customer tunneling.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tunnel-nearest-non-tpmr *boolean*

Synopsis Enable the nearest non-TPMR tunneling

Context **configure** *lag* *lag-interface* *lldp-member-template* *dest-mac* *keyword* **tunnel-nearest-non-tpmr** *boolean*

Tree [tunnel-nearest-non-tpmr](#)

Description When configured to **true**, the system allows LLDP packets received on the port with the destination address of the nearest non-TPMR to be tunneled without being intercepted on the local port.

When configured to **false**, the system disables nearest non-TPMR tunneling.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tx-mgmt-address [*mgmt-address-system-type*] *keyword*

Synopsis Enter the **tx-mgmt-address** list instance

Context **configure** *lag* *lag-interface* *lldp-member-template* *dest-mac* *keyword* **tx-mgmt-address** *keyword*

Tree [tx-mgmt-address](#)

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[mgmt-address-system-type] keyword

Synopsis Management address to transmit

Context **configure** [lag](#) [lag-interface](#) [lldp-member-template](#) [dest-mac](#) *keyword* [tx-mgmt-address](#) *keyword*

Tree [tx-mgmt-address](#)

Description This command configures the management address to transmit. The user can choose to send the following addresses, or any combination of these:

- system IPv4 address
- system IPv6 address
- out-of-band IPv4 address
- out-of-band IPv6 address

The system address is sent only once. The address must be configured for the specific version of the protocol to send the management address.

Options oob – Transmit out-of-band IPv4 address for active CPM
 system – Transmit the system IP address
 system-ipv6 – Transmit the system IPv6 address
 oob-ipv6 – Transmit the out-of-band IPv6 address for active CPM

Notes This element is part of a list key.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

admin-state keyword

Synopsis Administrative state of management address transmission

Context **configure** [lag](#) [lag-interface](#) [lldp-member-template](#) [dest-mac](#) *keyword* [tx-mgmt-address](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

tx-tlvs

Synopsis	Enter the tx-tlvs context
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i> tx-tlvs
Tree	tx-tlvs
Description	<p>Commands in this context configure which LLDP TLVs to transmit. The TX TLVs, defined as a bitmap, include the basic set of LLDP TLVs whose transmission is allowed on the local LLDP agent by network management. Each bit in the bitmap corresponds to a TLV type associated with a specific optional TLV. Organizationally-specific TLVs are excluded from this bitmap.</p> <p>There is no bit reserved for the management address TLV type because transmission of management address TLVs are controlled by another object.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-desc *boolean*

Synopsis	Transmit port description TLVs
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i> tx-tlvs port-desc <i>boolean</i>
Tree	port-desc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sys-cap *boolean*

Synopsis	Transmit system capabilities TLVs
Context	configure lag lag-interface lldp-member-template dest-mac <i>keyword</i> tx-tlvs sys-cap <i>boolean</i>
Tree	sys-cap
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sys-desc *boolean*

Synopsis	Transmit system description TLVs
Context	configure lag <i>lag-interface</i> <i>lldp-member-template</i> <i>dest-mac</i> <i>keyword</i> <i>tx-tlvs</i> sys-desc <i>boolean</i>
Tree	sys-desc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sys-name *boolean*

Synopsis	Transmit system name TLVs
Context	configure lag <i>lag-interface</i> <i>lldp-member-template</i> <i>dest-mac</i> <i>keyword</i> <i>tx-tlvs</i> sys-name <i>boolean</i>
Tree	sys-name
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address of the LAG
Context	configure lag <i>lag-interface</i> mac-address <i>mac-address</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ports *number***WARNING:**

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

Synopsis	Maximum number of ports allowed in the LAG
----------	--

Context	configure lag <i>lag-interface</i> max-ports <i>number</i>
Tree	max-ports
Description	This command configures the maximum number of ports allowed in the LAG. This command must be configured to 64 when the LAG name is a numeric identifier in the range of 1 to 64. If the LAG name is a numeric identifier in the range of 65 to 800, this command must be configured to 32.
Range	32 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

**WARNING:**

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

**WARNING:**

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

Synopsis	Operation mode of the LAG
Context	configure lag <i>lag-interface</i> mode <i>keyword</i>
Tree	mode
Options	access, network, hybrid
Default	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure lag <i>lag-interface</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [[port-id](#)] *reference*

Synopsis	Enter the port list instance
Context	configure lag <i>lag-interface</i> port <i>reference</i>
Tree	port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[port-id] *reference*

Synopsis	Identifier to uniquely identify the port in the LAG
Context	configure lag <i>lag-interface</i> port <i>reference</i>
Tree	port
Reference	configure port <i>port</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-weight (*number* | *keyword*)

Synopsis	Flow hashing distribution between LAG ports
Context	configure lag <i>lag-interface</i> port <i>reference</i> hash-weight (<i>number</i> <i>keyword</i>)
Tree	hash-weight
Range	1 to 100000
Options	port-speed
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority of the port in the LAG
Context	configure lag <i>lag-interface</i> port <i>reference</i> priority <i>number</i>
Tree	priority
Range	1 to 65535
Default	32768

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sub-group (*number* | *keyword*)



WARNING:

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

Synopsis Subgroup of the port in the LAG
Context **configure** **lag** *lag-interface* **port** *reference* **sub-group** (*number* | *keyword*)
Tree **sub-group**
Range 1 to 8
Options auto-iom, auto-mda
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

port-threshold

Synopsis Enter the **port-threshold** context
Context **configure** **lag** *lag-interface* **port-threshold**
Tree **port-threshold**
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

action *keyword*

Synopsis Action when the active links are at or below threshold
Context **configure** **lag** *lag-interface* **port-threshold** **action** *keyword*
Tree **action**
Options down, dynamic-cost, static-cost
Default down
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

cost *number*

Synopsis	Static cost of the LAG
Context	configure lag <i>lag-interface</i> port-threshold cost <i>number</i>
Tree	cost
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Active link threshold at which action is taken
Context	configure lag <i>lag-interface</i> port-threshold value <i>number</i>
Tree	value
Range	0 to 63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-type *keyword*

Synopsis	Port type of the LAG
Context	configure lag <i>lag-interface</i> port-type <i>keyword</i>
Tree	port-type
Options	standard, hs
Default	standard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ptp-timestamping

Synopsis	Enable the ptp-timestamping context
Context	configure lag <i>lag-interface</i> ptp-timestamping
Tree	ptp-timestamping
Description	Commands in this context configure LAG filtering for the 1588 timestamping of PTP messages to match multiple PTP flows.

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of PTP timestamping
Context	configure lag <i>lag-interface</i> ptp-timestamping admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipv4-address *ipv4-address*

Synopsis	IPv4 destination address for PTP messages into port
Context	configure lag <i>lag-interface</i> ptp-timestamping ipv4-address <i>ipv4-address</i>
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipv6-address *ipv6-address*

Synopsis	IPv6 destination address for PTP messages into port
Context	configure lag <i>lag-interface</i> ptp-timestamping ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

selection-criteria

Synopsis	Enter the selection-criteria context
Context	configure lag <i>lag-interface</i> selection-criteria

Tree	selection-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Criteria to select the active subgroup
Context	configure lag lag-interface selection-criteria mode <i>keyword</i>
Tree	mode
Options	highest-count, highest-weight, best-port
Default	highest-count
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

slave-to-partner *boolean*

Synopsis	Use slave-to-partner for selection criteria
Context	configure lag lag-interface selection-criteria slave-to-partner <i>boolean</i>
Tree	slave-to-partner
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subgroup-hold-time (*number* | *keyword*)

Synopsis	Delay time when switching to a new active subgroup
Context	configure lag lag-interface selection-criteria subgroup-hold-time (<i>number</i> <i>keyword</i>)
Tree	subgroup-hold-time
Range	0 to 2000
Units	deciseconds
Options	infinite
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-signaling *keyword*

Synopsis	Way of signaling a member port to the remote side
Context	configure lag <i>lag-interface</i> standby-signaling <i>keyword</i>
Tree	standby-signaling
Options	lacp, power-off
Default	lacp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.14 log commands

```

configure
- log
  - accounting-policy number
  - admin-state keyword
  - align boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - collection-interval number
  - custom-record
    - apply-groups reference
    - apply-groups-exclude reference
  - policer number
    - apply-groups reference
    - apply-groups-exclude reference
  - e-counters
    - exceed-profile-octets-discarded-count boolean
    - exceed-profile-octets-forwarded-count boolean
    - exceed-profile-octets-offered-count boolean
    - exceed-profile-packets-discarded-count boolean
    - exceed-profile-packets-forwarded-count boolean
    - exceed-profile-packets-offered-count boolean
    - in-plus-profile-octets-discarded-count boolean
    - in-plus-profile-octets-forwarded-count boolean
    - in-plus-profile-octets-offered-count boolean
    - in-plus-profile-packets-discarded-count boolean
    - in-plus-profile-packets-forwarded-count boolean
    - in-plus-profile-packets-offered-count boolean
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-octets-offered-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - in-profile-packets-offered-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-octets-offered-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - out-profile-packets-offered-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - i-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-octets-offered-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - in-profile-packets-offered-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-octets-offered-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - out-profile-packets-offered-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - queue number
    - apply-groups reference
    - apply-groups-exclude reference

```

configure log accounting-policy custom-record queue e-counters

```

- e-counters
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
- i-counters
  - all-octets-offered-count boolean
  - all-packets-offered-count boolean
  - high-octets-discarded-count boolean
  - high-octets-offered-count boolean
  - high-packets-discarded-count boolean
  - high-packets-offered-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - low-octets-discarded-count boolean
  - low-octets-offered-count boolean
  - low-packets-discarded-count boolean
  - low-packets-offered-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- ref-policer
  - all
  - e-counters
    - exceed-profile-octets-discarded-count boolean
    - exceed-profile-octets-forwarded-count boolean
    - exceed-profile-octets-offered-count boolean
    - exceed-profile-packets-discarded-count boolean
    - exceed-profile-packets-forwarded-count boolean
    - exceed-profile-packets-offered-count boolean
    - in-plus-profile-octets-discarded-count boolean
    - in-plus-profile-octets-forwarded-count boolean
    - in-plus-profile-octets-offered-count boolean
    - in-plus-profile-packets-discarded-count boolean
    - in-plus-profile-packets-forwarded-count boolean
    - in-plus-profile-packets-offered-count boolean
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-octets-offered-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - in-profile-packets-offered-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-octets-offered-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - out-profile-packets-offered-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - i-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-octets-offered-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - in-profile-packets-offered-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean

```

configure log accounting-policy custom-record ref-policer i-counters out-profile-octets-offered-count

```

    - out-profile-octets-offered-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - out-profile-packets-offered-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - id reference
- ref-queue
  - all
  - e-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
  - i-counters
    - all-octets-offered-count boolean
    - all-packets-offered-count boolean
    - high-octets-discarded-count boolean
    - high-octets-offered-count boolean
    - high-packets-discarded-count boolean
    - high-packets-offered-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - low-octets-discarded-count boolean
    - low-octets-offered-count boolean
    - low-packets-discarded-count boolean
    - low-packets-offered-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - id reference
  - significant-change number
- default boolean
- description description
- destination
  - file reference
  - null
- include-system-info boolean
- record keyword
- app-route-notifications
  - cold-start-wait number
  - route-recovery-wait number
- apply-groups reference
- apply-groups-exclude reference
- encryption-key encrypted-leaf
- event-damping boolean
- event-handling
  - handler named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - min-delay number
      - script-policy

```

configure log event-handling handler entry script-policy name

```

    - name reference
    - owner reference
- event-trigger
- adp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- auto-prov event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- bfd event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- bgp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- chassis event keyword

```

configure log event-trigger chassis admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *description*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **debug event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **dhcp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **dhcps event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **diameter event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*

configure log event-trigger diameter entry

- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **dot1x event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **dynsvc event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **efm-oam event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ering event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log event-trigger ering entry debounce

```

-   debounce
-       time number
-       value number
-   description description
-   filter reference
-   handler reference
- eth-cfm event keyword
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   description description
-   entry number
-       admin-state keyword
-       apply-groups reference
-       apply-groups-exclude reference
-       debounce
-           time number
-           value number
-       description description
-       filter reference
-       handler reference
- etun event keyword
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   description description
-   entry number
-       admin-state keyword
-       apply-groups reference
-       apply-groups-exclude reference
-       debounce
-           time number
-           value number
-       description description
-       filter reference
-       handler reference
- filter event keyword
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   description description
-   entry number
-       admin-state keyword
-       apply-groups reference
-       apply-groups-exclude reference
-       debounce
-           time number
-           value number
-       description description
-       filter reference
-       handler reference
- gsmp event keyword
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   description description
-   entry number
-       admin-state keyword
-       apply-groups reference
-       apply-groups-exclude reference
-       debounce
-           time number
-           value number
-       description description

```

configure log event-trigger gsmpp entry filter

- **filter** *reference*
 - **handler** *reference*
- **igmp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **igmp-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ip event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ipsec event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **isis event** *keyword*
 - **admin-state** *keyword*

configure log event-trigger isis apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *description*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **lag event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ldap event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ldp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **lldp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*

configure log event-trigger lldp entry admin-state

- **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **logger event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **macsec event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **mc-redundancy event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **mcpath event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**

configure log event-trigger mcpath entry debounce time

```

    - time number
    - value number
    - description description
    - filter reference
    - handler reference
- mgmt-core event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description description
      - filter reference
      - handler reference
- mirror event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description description
      - filter reference
      - handler reference
- mld event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description description
      - filter reference
      - handler reference
- mld-snooping event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description description
      - filter reference

```

configure log event-trigger mld-snooping entry handler

- **handler** *reference*
- **mpls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **mpls-tp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ntp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **oam event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ospf event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger ospf apply-groups-exclude

```

- apply-groups-exclude reference
- description description
- entry number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - debounce
    - time number
    - value number
  - description description
  - filter reference
  - handler reference
- pcap event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- pcep event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- pfcf event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- pim event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword

```


configure log event-trigger pim entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *description*
- **filter** *reference*
- **handler** *reference*
- **pim-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **port event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **ptp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **python event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*

configure log event-trigger python entry debounce value

```

    - value number
    - description description
    - filter reference
    - handler reference
- radius event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- rip event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- ripng event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- route-policy event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference

```

configure log event-trigger rpki

- **rpki event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **rsvp event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **security event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **snmp event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **description** description
 - **entry** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **debounce**
 - **time** number
 - **value** number
 - **description** description
 - **filter** reference
 - **handler** reference
- **sr-mpls event** keyword
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference

configure log event-trigger sr-mpls description

- **description** *description*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **sr-policy event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **stp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **svcmgr event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **system event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger system entry apply-groups-exclude

```

- apply-groups-exclude reference
- debounce
  - time number
  - value number
- description description
- filter reference
- handler reference
- tls event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- user event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- vrrp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description description
    - filter reference
    - handler reference
- vrtr event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number

```

configure log event-trigger vrtr entry description

- **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **wlan-gw event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **wpp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *description*
 - **filter** *reference*
 - **handler** *reference*
- **file** *file-policy-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **compact-flash-location**
 - **backup** *keyword*
 - **primary** *keyword*
 - **description** *description*
 - **format** *keyword*
 - **retention** *number*
 - **rollover** *number*
- **file-storage-control**
 - **accounting-files-total-size** *number*
 - **log-files-total-size** *number*
- **filter** *log-filter-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **description** *description*
 - **named-entry** *log-filter-entry-name*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **match**
 - **application**
 - **eq** *keyword*
 - **neq** *keyword*
 - **event**
 - **eq** *number*
 - **gt** *number*
 - **gte** *number*

configure log filter named-entry match event lt

```

    - lt number
    - lte number
    - neq number
  - message
    - eq string
    - neq string
    - regexp boolean
  - severity
    - eq keyword
    - gt keyword
    - gte keyword
    - lt keyword
    - lte keyword
    - neq keyword
  - subject
    - eq named-item
    - neq named-item
    - regexp boolean
  - vrtr-name
    - eq named-item
    - neq named-item
    - regexp boolean
- log-events
  - adp event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - auto-prov event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - bfd event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - bgp event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - chassis event keyword

```

configure log log-events chassis apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- debug event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- dhcp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- dhcps event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- diameter event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- dot1x event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- dynsvc event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean

```


configure log log-events dynsvc severity

```

- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- efm-oam event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ering event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- eth-cfm event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- etun event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- filter event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- gsmp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number

```

configure log log-events gsmpp throttle

```

- throttle boolean
- igmp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- igmp-snooping event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ip event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ipsec event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- isis event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- lag event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ldap event keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure log log-events ldap generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ldap event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- lldp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- logger event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- macsec event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mc-redundancy event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mcpaht event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean

```

configure log log-events mcpath specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mgmt-core event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mirror event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld-snooping event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls-tp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- nat event keyword

```

configure log log-events nat apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ntp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- oam event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ospf event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- pcap event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- pcep event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- pfcp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean

```

configure log log-events pfcv severity

```

- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- pim event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- pim-snooping event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- port event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ptp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- python event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- radius event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number

```

configure log log-events radius throttle

- **throttle** *boolean*
- **rip event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ripng event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **route-policy event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **rpki event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **rsvp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **security event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **snmp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log log-events snmp generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sr-mpls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sr-policy event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- stp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- svcmgr event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- system event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- tls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean

```


configure log log-events tls specific-throttle-interval

- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **user event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **vrp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **vrtr event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **wlan-gw event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **wpp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **log-id** *log-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **destination**
 - **cli**
 - **max-entries** *number*
 - **console**
 - **file** *reference*
 - **memory**

configure log log-id destination memory max-entries

```

- max-entries number
- netconf
  - max-entries number
- snmp
  - max-entries number
- syslog reference
- filter reference
- netconf-stream named-item
- source
  - change boolean
  - debug boolean
  - main boolean
  - security boolean
- time-format keyword
- route-preference
  - primary keyword
  - secondary keyword
- services-all-events
  - service reference
- snmp-trap-group snmp-trap-group-name
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - trap-target string
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - notify-community string
    - port number
    - replay boolean
    - security-level keyword
    - version keyword
- syslog log-syslog-name
  - address (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - facility keyword
  - hostname
    - use-system-name
    - value named-item-255
  - log-prefix (keyword | string)
  - port number
  - protocol-version keyword
  - severity keyword
  - timestamp-format keyword
  - tls-client-profile reference
- throttle-rate
  - interval number
  - limit number

```

4.14.1 log command descriptions

log

Synopsis	Enter the log context
Context	configure log
Tree	log
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy [[policy-id](#)] *number*

Synopsis	Enter the accounting-policy list instance
Context	configure log accounting-policy <i>number</i>
Tree	accounting-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[policy-id](#)] *number*

Synopsis	Accounting policy unique ID
Context	configure log accounting-policy <i>number</i>
Tree	accounting-policy
Range	1 to 99
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the accounting policy
Context	configure log accounting-policy <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	This command controls the administrative state of the accounting policy.

When an accounting policy is disabled, no accounting data is written to the destination log ID. Counters in the billing data reflect totals, and not increments. When the policy is re-enabled, the counters include the data collected during the period the policy was administratively disabled.

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

align *boolean*

Synopsis	Align statistics collection interval to absolute time
Context	configure log accounting-policy <i>number</i> align <i>boolean</i>
Tree	align
Description	<p>When the align command is configured to true, statistics collection is aligned to the nearest interval within an hour. Statistics are generated when the absolute time can be divided by the collection-interval value, after which the collection interval continues. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:15, 15:30, 15:45, 16:00, 16:15, and so on. This supports synchronized statistics intervals and collection across multiple nodes in the network.</p> <p>When the align command is configured to false, statistics collection occurs immediately after the configuration has been committed. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:03, 15:18, 15:33, 15:48, 16:03, and so on.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collection-interval *number*

Synopsis	Accounting collection interval
Context	configure log accounting-policy <i>number</i> collection-interval <i>number</i>
Tree	collection-interval
Range	1 to 120
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

custom-record

Synopsis	Enter the custom-record context
Context	configure log accounting-policy <i>number</i> custom-record
Tree	custom-record
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [*id*] *number*

Synopsis	Enter the policer list instance
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[*id*] *number*

Synopsis	Policer ID
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters
Tree	e-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-discarded-count <i>boolean</i>
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-forwarded-count <i>boolean</i>
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-offered-count <i>boolean</i>
Tree	exceed-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-discarded-count <i>boolean</i>
Tree	exceed-profile-packets-discarded-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-forwarded-count <i>boolean</i>
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-offered-count <i>boolean</i>
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-octets-discarded-count <i>boolean</i>
Tree	in-plus-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-octets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-octets-offered-count *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-octets-offered-count <i>boolean</i>
Tree	in-plus-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-packets-discarded-count *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-discarded-count <i>boolean</i>
Tree	in-plus-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-plus profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-packets-forwarded-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-packets-offered-count *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-offered-count <i>boolean</i>
Tree	in-plus-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters
Tree	i-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
----------	---

Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters
Tree	e-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-packets-discarded-count <i>boolean</i>

Tree	in-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters
Tree	i-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

all-packets-offered-count *boolean*

Synopsis Include all packets offered count

Context **configure** [log accounting-policy](#) *number* [custom-record queue](#) *number* [i-counters](#) [all-packets-offered-count](#) *boolean*

Tree [all-packets-offered-count](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

high-octets-discarded-count *boolean*

Synopsis Include the high octets discarded count

Context **configure** [log accounting-policy](#) *number* [custom-record queue](#) *number* [i-counters](#) [high-octets-discarded-count](#) *boolean*

Tree [high-octets-discarded-count](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

high-octets-offered-count *boolean*

Synopsis Include the high octets offered count

Context **configure** [log accounting-policy](#) *number* [custom-record queue](#) *number* [i-counters](#) [high-octets-offered-count](#) *boolean*

Tree [high-octets-offered-count](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

high-packets-discarded-count *boolean*

Synopsis Include the high packets discarded count

Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-packets-discarded-count <i>boolean</i>
Tree	high-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-packets-offered-count <i>boolean</i>
Tree	high-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ref-policer

Synopsis	Enter the ref-policer context
Context	configure log accounting-policy <i>number</i> custom-record ref-policer
Tree	ref-policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Apply significant change to counters for all policers
Context	configure log accounting-policy <i>number</i> custom-record ref-policer all
Tree	all
Notes	The following elements are part of a choice: all or id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters
Tree	e-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-octets-discarded-count <i>boolean</i>
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-octets-forwarded-count <i>boolean</i>
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-octets-offered-count <i>boolean</i>
Tree	exceed-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-discarded-count <i>boolean</i>
Tree	exceed-profile-packets-discarded-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-forwarded-count <i>boolean</i>
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-offered-count <i>boolean</i>
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-discarded-count <i>boolean</i>
Tree	in-plus-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-octets-offered-count *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-offered-count <i>boolean</i>
Tree	in-plus-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-packets-discarded-count *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-packets-discarded-count <i>boolean</i>
Tree	in-plus-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-plus profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-packets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-packets-forwarded-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-plus-profile-packets-offered-count *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-packets-offered-count <i>boolean</i>
Tree	in-plus-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters
Tree	i-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
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Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id *reference*

Synopsis	Policer ID
Context	configure log accounting-policy <i>number</i> custom-record ref-policer id <i>reference</i>
Tree	id
Reference	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Notes	The following elements are part of a choice: all or id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ref-queue

Synopsis	Enter the ref-queue context
Context	configure log accounting-policy <i>number</i> custom-record ref-queue
Tree	ref-queue

Description	Commands in this context configure reference queue counters for significant change only reporting. The custom record is only generated when the change in the sum of all queue and policer reference counters equals or exceeds the configured (non-zero) significant change value.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all

Synopsis	Apply significant change to counters for all queues
Context	configure log accounting-policy <i>number</i> custom-record ref-queue all
Tree	all
Notes	The following elements are part of a choice: all or id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters
Tree	e-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters
Tree	i-counters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters all-packets-offered-count <i>boolean</i>
Tree	all-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

high-octets-offered-count *boolean*

Synopsis Include the high octets offered count

Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#) [high-octets-offered-count](#) *boolean*

Tree [high-octets-offered-count](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

high-packets-discarded-count *boolean*

Synopsis Include the high packets discarded count

Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#) [high-packets-discarded-count](#) *boolean*

Tree [high-packets-discarded-count](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

high-packets-offered-count *boolean*

Synopsis Include the high packets offered count

Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#) [high-packets-offered-count](#) *boolean*

Tree [high-packets-offered-count](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in-profile octets forwarded count

Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id *reference*

Synopsis	Queue ID
Context	configure log accounting-policy <i>number</i> custom-record ref-queue id <i>reference</i>
Tree	id
Reference	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Notes	The following elements are part of a choice: all or id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

significant-change *number*

Synopsis	Significant change required to generate the record
Context	configure log accounting-policy <i>number</i> custom-record significant-change <i>number</i>
Tree	significant-change
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default *boolean***WARNING:**

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

Synopsis	Default accounting policy for all objects that do not have an accounting policy
Context	configure log accounting-policy <i>number</i> default <i>boolean</i>
Tree	default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log accounting-policy <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination

Synopsis	Enter the destination context
Context	configure log accounting-policy <i>number</i> destination

Tree	destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

file reference

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

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

Synopsis	Unique file identifier when creating a log or accounting file
Context	configure log accounting-policy <i>number</i> destination file <i>reference</i>
Tree	file
Reference	configure log file <i>file-policy-name</i>
Notes	The following elements are part of a choice: file or null .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

null

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

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

Synopsis	Indicate no destination for accounting policy records
Context	configure log accounting-policy <i>number</i> destination null
Tree	null
Notes	The following elements are part of a choice: file or null .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-system-info *boolean*

Synopsis	Include system information in accounting policy records
Context	configure log accounting-policy <i>number</i> include-system-info <i>boolean</i>
Tree	include-system-info
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record *keyword***WARNING:**

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

**WARNING:**

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

Synopsis	Accounting policy record type
Context	configure log accounting-policy <i>number</i> record <i>keyword</i>
Tree	record
Description	<p>This command adds the accounting record type to the accounting policy that is forwarded to the configured accounting file. A record name can only be used in one accounting policy. To obtain a list of all record types that can be configured, use the show log accounting-records command.</p> <p>To configure an accounting policy for access ports, select a service record (for example, service-ingress-octets). To change the record name to another service record, configure the new record name with this command.</p> <p>When configuring an accounting policy for network ports, select a network record. To change the record name to another network record, configure the new record name with this command.</p>
Options	service-ingress-octets, service-egress-octets, service-ingress-packets, service-egress-packets, network-ingress-octets, network-egress-octets, network-ingress-packets, network-egress-packets, compact-service-ingress-octets, combined-service-ingress, combined-network-ing-egr-octets, combined-service-ing-egr-octets, complete-service-ingress-egress, combined-sdp-ingress-egress, complete-sdp-ingress-egress, complete-subscriber-ingress-egress, aa-protocol, aa-application, aa-app-group, aa-subscriber-protocol, aa-subscriber-application, custom-record-subscriber, custom-record-service, custom-record-aa-sub, queue-group-octets, queue-group-packets, combined-queue-group, combined-mpls-lsp-ingress,

combined-mpls-lsp-egress, combined-ldp-lsp-egress, saa, video, aa-performance, complete-ethernet-port, extended-service-ingress-egress, complete-network-ing-egr, aa-partition, complete-pm, aa-admit-deny, network-interface-ingress-octets, network-interface-egress-octets, network-interface-ingress-packets, network-interface-egress-packets, combined-network-interface-ingress, combined-network-interface-egress, complete-network-interface-ing-egr, access-egress-octets, access-egress-packets, combined-access-egress, combined-network-egress, complete-service-activation-test, combined-mpls-srte-egress, combined-sr-policy-egress

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

app-route-notifications

Synopsis Enter the **app-route-notifications** context

Context **configure** [log app-route-notifications](#)

Tree [app-route-notifications](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cold-start-wait *number*

Synopsis Time delay before notifying specific CPM applications for available route

Context **configure** [log app-route-notifications cold-start-wait *number*](#)

Tree [cold-start-wait](#)

Range 1 to 300

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route-recovery-wait *number*

Synopsis Time delay before notifying specific CPM applications after route recovery or change

Context **configure** [log app-route-notifications route-recovery-wait *number*](#)

Tree [route-recovery-wait](#)

Range 1 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

encryption-key *encrypted-leaf*

Synopsis	Secret key for the encryption of log files
Context	configure log encryption-key encrypted-leaf
Tree	encryption-key
Description	<p>This command specifies the encryption key used by AES-256-CTR for log file encryption. The encryption key is used for all local log files on the system.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 126
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-damping *boolean*

Synopsis	Allow event damping algorithm to suppress QoS or filter change events
Context	configure log event-damping boolean
Tree	event-damping
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-handling

Synopsis	Enter the event-handling context
Context	configure log event-handling
Tree	event-handling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler [[name](#)] *named-item*

Synopsis	Enter the handler list instance
Context	configure log event-handling handler named-item
Tree	handler

Max. instances	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	EHS handler name
Context	configure log event-handling handler <i>named-item</i>
Tree	handler
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS handler
Context	configure log event-handling handler <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-handling handler <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i>
Tree	entry
Max. instances	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	EHS handler entry ID
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS handler entry
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i> description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-delay *number*

Synopsis	Minimum delay between subsequent executions of the script policy
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i> min-delay <i>number</i>
Tree	min-delay
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script-policy

Synopsis	Enable the script-policy context
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i> script-policy
Tree	script-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Script policy name
Context	configure log event-handling handler <i>named-item</i> entry <i>number</i> script-policy <i>name reference</i>
Tree	name
Reference	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner reference

Synopsis	Script policy owner
Context	configure log event-handling handler <i>named-item</i> entry number script-policy owner reference
Tree	owner
Default	TIMOS CLI
Reference	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-trigger

Synopsis	Enter the event-trigger context
Context	configure log event-trigger
Tree	event-trigger
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adp [event](#) keyword

Synopsis	Enter the adp list instance
Context	configure log event-trigger adp event <i>keyword</i>
Tree	adp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger adp event <i>keyword</i>
Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger adp event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger adp event](#) *keyword* **description** *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger adp event](#) *keyword* **entry** *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger adp event](#) *keyword* **entry** *number*

Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-prov [event](#) *keyword*

Synopsis	Enter the auto-prov list instance
Context	configure log event-trigger auto-prov event <i>keyword</i>
Tree	auto-prov
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger auto-prov event <i>keyword</i>
Tree	auto-prov
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger auto-prov event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger auto-prov event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger auto-prov event <i>keyword entry number description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword entry number filter reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd event keyword

Synopsis	Enter the bfd list instance
Context	configure log event-trigger bfd event keyword
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger bfd event keyword
Tree	bfd
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bfd event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger bfd event keyword description description

Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger bfd event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger bfd event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger bfd event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger bfd event keyword entry number description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

filter reference

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger bfd event](#) *keyword* [entry number](#) [filter reference](#)

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger bfd event](#) *keyword* [entry number](#) [handler reference](#)

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bgp event keyword

Synopsis Enter the **bgp** list instance

Context **configure** [log event-trigger bgp event](#) *keyword*

Tree [bgp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger bgp event <i>keyword</i>
Tree	bgp
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bgp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger bgp event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger bgp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger bgp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger bgp event](#) *keyword* [entry](#) *number* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger bgp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger bgp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger bgp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger bgp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger bgp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger bgp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chassis [event](#) *keyword*

Synopsis	Enter the chassis list instance
Context	configure log event-trigger chassis event <i>keyword</i>
Tree	chassis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger chassis event <i>keyword</i>
Tree	chassis
Options	<p>tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm, tmnxEqSynclftimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclftimingRef1Quality, tmnxEqSynclftimingRef2Quality, tmnxEqSynclftimingBITSQuality, tmnxEqSynclftimingBITS2Quality, tmnxEqSynclftimingRefSwitch, tmnxEqSynclftimingBITS2Alarm, tmnxEqSynclftimingBITS2AlarmClr, tmnxEqSynclftimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclftimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclftimingPTPQuality, tmnxEqSynclftimingPTPAlarm, tmnxEqSynclftimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAlsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxlomResHighLimitReached, tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow, tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdaIngrXplError, tmnxSynclftimBITS2048khzUnsup, tmnxSynclftimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp, tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail, tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail, tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail, tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,</p>

tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,
tmnxEqPhysChassisFanFailureClear, tIPsecIsaMemLowWatermark,
tIPsecIsaMemHighWatermark, tIPsecIsaMemMax, tmnxCpmMemSizeMismatch,
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,
tmnxPhysChassisPCMinputFeed, tmnxPhysChassisPCMinputFeedClr,
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,
tmnxIPv6CpmFilterOverloadClear, tmnxGnssAcquiringFix, tmnxGnssAcquiredFix,
tmnxPhysChassisPMOutFail, tmnxPhysChassisPMOutFailClr,
tmnxPhysChassisPMInputFeed, tmnxPhysChassisPMInputFeedClr,
tmnxPhysChassisFilterDoorOpen, tmnxPhysChassisFilterDoorClosed,
tmnxPhysChassisPMOverTemp, tmnxPhysChassisPMOverTempClr,
tmnxEqFpgaSoftError, tmnxEqSynclfTimingSyncEQuality,
tmnxEqSynclfTimingSyncE2Quality, tmnxEqSynclfTimingSyncEAlarm,
tmnxEqSynclfTimingSyncEAlarmClr, tmnxEqSynclfTimingSyncE2Alarm,
tmnxEqSynclfTimingSyncE2AlarmClr, tmnxEqHwEventDetected,
tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered, tmnxEsaConnected,
tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,
tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,
tmnxIPv6FilterEgrNearFullClear, tmnxEsaStolenTimeDetected,
tmnxEsaHwStatusDegraded, tmnxEsaHwStatusDegradedClr,
tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr, tmnxEsaHwPwrSup1Degraded,
tmnxEsaHwPwrSup1DegradedClr, tmnxEsaHwPwrSup1Failed,
tmnxEsaHwPwrSup1FailedClr, tmnxEsaHwPwrSup2Degraded,
tmnxEsaHwPwrSup2DegradedClr, tmnxEsaHwPwrSup2Failed,

tmnxEsaHwPwrSup2FailedClr, tmnxEsaHwFanBankNonRedun,
tmnxEsaHwFanBankNonRedunClr, tmnxEsaHwFanBankFailRedun,
tmnxEsaHwFanBankFailRedunClr, tmnxEsaHwFanStatusDegraded,
tmnxEsaHwFanStatusDegradedClr, tmnxEsaHwFanStatusFailed,
tmnxEsaHwFanStatusFailedClr, tmnxEsaHwPwrSupMismatch,
tmnxEsaHwPwrSupMismatchClr, tmnxEsaHwPwrSupBankNonRedun,
tmnxEsaHwPwrSupBankNonRedunClr, tmnxEsaHwPwrSupBankFailRedun,
tmnxEsaHwPwrSupBankFailRedunClr, tmnxEsaHwTemperatureDegraded,
tmnxEsaHwTemperatureDegradedClr, tmnxEsaHwTemperatureFailed,
tmnxEsaHwTemperatureFailedClr, tmnxPowerSupplyFanFailed,
tmnxPowerSupplyFanFailedClear, tmnxLxrResourceHighUsage,
tmnxLxrResourceExhausted, tmnxLxrResourceRecovered,
tmnxLxrResourceHighUsageByOwner, tmnxLxrResourceExhaustedByOwner,
tmnxLxrResourceRecoveredByOwner, tmnxSasAlarminput1StateChanged,
tmnxSasAlarminput2StateChanged, tmnxSasAlarminput3StateChanged,
tmnxSasAlarminput4StateChanged, tmnxAlarmInputVoltageFailure,
tmnxlomRsrcUsageHighLimitReached, tmnxlomRsrcUsageExhausted,
tmnxlomRsrcUsageRecovered, tmnxlomRsrcEventOverflow,
tmnxlomRsrcEventOverflowClr, tmnxlomRsrcOwnerOversubscribed,
tmnxlomRsrcOwnerOversubscrbdClr, tmnxInterChassisCommsDown,
tmnxInterChassisCommsUp, tmnxCpmlcPortDown, tmnxCpmlcPortUp,
tmnxCpmlcPortSFFInserted, tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort,
tmnxCpmBNoLocallcPort, tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail,
CpmlcPortSFFStatusFailure, CpmlcPortSFFStatusDDMCorrupt,
CpmlcPortSFFStatusReadError, CpmlcPortSFFStatusUnsupported,
tmnxCpmlcPortDDMFailure, tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown,
tmnxSfmlcPortUp, tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved,
SfmlcPortSFFStatusFailure, SfmlcPortSFFStatusDDMCorrupt,
SfmlcPortSFFStatusReadError, SfmlcPortSFFStatusUnsupported,
tmnxSfmlcPortDDMFailure, tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded,
tmnxSfmlcPortDegradedClear, tmnxCardResMacFdbHighUsgSet,
tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch,
tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp,
tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown,
tmnxPowerShelfOutputStatusUp, tmnxEqCardMissing, tmnxEqCardMissingClear,
tmnxEqEsaHostPortCrcAlarm, tmnxEqEsaHostPortCrcAlarmClear,
tmnxEsaFirmwareUpgradeInProgress, tmnxEsaFirmwareUpgradeDone,
tmnxEsaFirmwareUpgradeFailed, tmnxChassisAntiTheftModeBoot,
tmnxChassisAntiTheftUnlocked, tmnxEqLowPowerSwFabModeEnabled,
tmnxEqLowPowerSwFabModeDisabled, tmnxChassisGoldenStatusEvent,
tmnxEqFlashDiskFormatStart, tmnxEqFlashDiskFormatFinish, tmnxEsaColdRebooted,
tmnxEqCardFirmwareUpgradeStarted, tmnxEqCardFirmwareUpgradeFailed,
tmnxChassisFanModuleMismatch, tmnxChassisFanModuleMismatchClr,
tmnxChassisAntiTheftMismatch, tmnxChassisAntiTheftMismatchClr,
tmnxChassisFanModuleOperUp

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger chassis event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger chassis event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> debounce <i>value</i> <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger chassis event <i>keyword</i> entry <i>number</i> handler <i>reference</i>

Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug [event](#) *keyword*

Synopsis	Enter the debug list instance
Context	configure log event-trigger debug event <i>keyword</i>
Tree	debug
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger debug event <i>keyword</i>
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger debug event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger debug event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger debug event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[id](#)] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger debug event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger debug event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced25.3.R2

Platforms7705 SAR Gen 2

debounce

SynopsisEnter the **debounce** context

Context**configure** [log event-trigger debug event keyword entry number debounce](#)

Tree[debounce](#)

Introduced25.3.R2

Platforms7705 SAR Gen 2

time *number*

SynopsisTime window for events for EHS to trigger a response

Context**configure** [log event-trigger debug event keyword entry number debounce time number](#)

Tree[time](#)

Range1 to 604800

Unitsseconds

Introduced25.3.R2

Platforms7705 SAR Gen 2

value *number*

SynopsisOccurrences in time interval to trigger EHS response

Context**configure** [log event-trigger debug event keyword entry number debounce value number](#)

Tree[value](#)

Range2 to 15

Introduced25.3.R2

Platforms7705 SAR Gen 2

description *description*

SynopsisText description

Context**configure** [log event-trigger debug event keyword entry number description description](#)

Tree[description](#)

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger debug event keyword <i>entry number filter reference</i>
Tree	<i>filter</i>
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger debug event keyword <i>entry number handler reference</i>
Tree	<i>handler</i>
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp event keyword

Synopsis	Enter the dhcp list instance
Context	configure log event-trigger dhcp event keyword
Tree	<i>dhcp</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger dhcp event](#) *keyword*

Tree [dhcp](#)

Options svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger dhcp event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger dhcp event](#) *keyword* [description](#) *description*

Tree [description](#)

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> debounce description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger dhcp event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger dhcp event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dhcps [event](#) *keyword*

Synopsis Enter the **dhcps** list instance

Context **configure** [log event-trigger dhcps event](#) *keyword*

Tree [dhcps](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger dhcps event keyword
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped, tmnxDhcpSvrSkipCustomOptionMapTE
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dhcps event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger dhcps event keyword description description
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dhcps event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dhcps event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dhcps event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger dhcps event <i>keyword</i> entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger dhcps event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger dhcps event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

diameter [event](#) *keyword*

Synopsis Enter the **diameter** list instance

Context **configure** [log event-trigger diameter event](#) *keyword*

Tree [diameter](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger diameter event <i>keyword</i>
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger diameter event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger diameter event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
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Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> filter <i>reference</i>

Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1x event keyword

Synopsis	Enter the dot1x list instance
Context	configure log event-trigger dot1x event <i>keyword</i>
Tree	dot1x
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Events for dynsvc module
Context	configure log event-trigger dot1x event <i>keyword</i>
Tree	dot1x
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dot1x event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger dot1x event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i>

Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger dot1x event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger dot1x event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynsvc [event](#) *keyword*

Synopsis	Enter the dynsvc list instance
Context	configure log event-trigger dynsvc event <i>keyword</i>
Tree	dynsvc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger dynsvc event <i>keyword</i>
Tree	dynsvc
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dynsvc event <i>keyword admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger dynsvc event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger dynsvc event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger dynsvc event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger dynsvc event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dynsvc event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dynsvc event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dynsvc event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger dynsvc event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

efm-oam event keyword

Synopsis	Enter the efm-oam list instance
Context	configure log event-trigger efm-oam event keyword
Tree	efm-oam
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger efm-oam event keyword
Tree	efm-oam
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger efm-oam event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger efm-oam event keyword description description
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Description	This command configures an instance of a trigger for an EHS handler. A trigger entry binds a set of matching criteria for a log event to a particular handler. If the log event occurs in the system and matches the criteria configured in the associated log filter, the handler is executed.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* **debounce**

Tree [debounce](#)

Description Commands in this context configure when to trigger a debounce, for example after one or more event occurrences. The number of occurrences of an event can be bounded by a time window or left open.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* **debounce** *time* *number*

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

value *number*

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* **debounce** *value* *number*

Tree [value](#)

Range 2 to 15

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ering event keyword

Synopsis	Enter the ering list instance
Context	configure log event-trigger ering event keyword
Tree	ering
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ering event keyword
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ering event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger ering event keyword description description
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** **log event-trigger** **ering event** *keyword* **entry** *number*

Tree **entry**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** **log event-trigger** **ering event** *keyword* **entry** *number*

Tree **entry**

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** **log event-trigger** **ering event** *keyword* **entry** *number* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger ering event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ering event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ering event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger ering event keyword entry number description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ering event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ering event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm event keyword

Synopsis	Enter the eth-cfm list instance
Context	configure log event-trigger eth-cfm event <i>keyword</i>
Tree	eth-cfm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger eth-cfm event keyword
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFciltyFaultRaise, tmnxDot1agCfmMepFciltyFaultClear, tmnxDot1agCfmMepOperGrpStateChgd
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger eth-cfm event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger eth-cfm event keyword description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger eth-cfm event keyword entry number

Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
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Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i> debounce <i>time</i> <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i> debounce <i>value</i> <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger eth-cfm event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

etun event keyword

Synopsis	Enter the etun list instance
Context	configure log event-trigger etun event <i>keyword</i>
Tree	etun
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger etun event <i>keyword</i>
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsNRaiseAlarm, tmnxEthTunnelApsPrvsNClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger etun event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger etun event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger etun event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger etun event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger etun event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger etun event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger etun event keyword entry number debounce value number

Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger etun event keyword entry number description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number filter reference
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter log-filter-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number handler reference
Tree	handler

Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter [event](#) *keyword*

Synopsis	Enter the filter list instance
Context	configure log event-trigger filter event <i>keyword</i>
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger filter event <i>keyword</i>
Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger filter event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger filter event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger filter event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger filter event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger filter event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger filter event keyword entry number description description
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gsmp event keyword

Synopsis	Enter the gsmp list instance
Context	configure log event-trigger gsmp event <i>keyword</i>
Tree	gsmp
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [gsmp event](#) *keyword*

Tree [gsmp](#)

Options tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state keyword

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [gsmp event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description description

Synopsis Text description

Context **configure** [log event-trigger](#) [gsmp event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger gsmp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter

Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger gsm event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp event keyword

Synopsis	Enter the igmp list instance
Context	configure log event-trigger igmp event <i>keyword</i>
Tree	igmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger igmp event <i>keyword</i>
Tree	igmp
Options	vRtrIgmpIfRxQueryVerMismatch, vRtrIgmpIfCModeRxQueryMismatch, vRtrIgmpMaxGrpsLimitExceeded, vRtrIgmpMcacPlcyDropped, vRtrIgmpHostInstantiationFail, vRtrIgmpHostMaxGrpsLimitExceeded, vRtrIgmpHostMcacPlcyDropped, vRtrIgmpHostCModeRxQueryMismatch, vRtrIgmpHostRxQueryVerMismatch, vRtrIgmpHostMaxSrcsLimitExceeded,

vRtrIgmPMaxSrcsLimitExceeded, vRtrIgmPGrpIfSapMaxGrpsLimExceed,
vRtrIgmPGrpIfSapMaxSrcsLimExceed, vRtrIgmPGrpIfSapMcacPlcyDropped,
vRtrIgmPGrpIfSapCModeRxQueryMism, vRtrIgmPGrpIfSapRxQueryVerMism,
vRtrIgmPHostMaxGrpSrcsLimitExcd, vRtrIgmPMaxGrpSrcsLimitExceeded,
vRtrIgmPGrpIfSapMaxGrpSrcLimExcd, vRtrIgmPHostQryIntervalConflict,
vRtrIgmPNotifyNumOfIPseclfLowWm, vRtrIgmPNotifyNumOfIPseclfHighWm,
vRtrIgmPNotifyNumOfIPseclfMaxRch, vRtrIgmPSlaProflnstMcacPlcyDrop

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger igmp event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger igmp event](#) *keyword* **description** *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger igmp event](#) *keyword* **entry** *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* **debounce**

Tree [debounce](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* **debounce** **time** *number*

Tree [time](#)

Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger igmp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping [event](#) *keyword*

Synopsis	Enter the igmp-snooping list instance
Context	configure log event-trigger igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Options	saplgmpSnpgGrpLimitExceeded, saplgmpSnpgMcacPlcyDropped, sdpBndlgmpSnpgGrpLimitExceeded, sdpBndlgmpSnpgMcacPlcyDropped, saplgmpSnpgMcsFailure, saplgmpSnpgSrcLimitExceeded, sdpBndlgmpSnpgSrcLimitExceeded, sdpBndlgmpSnpgGrpSrcLimitExceed, saplgmpSnpgGrpSrcLimitExceeded, eMplsIgmpSnpgMfibFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger igmp-snooping event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger igmp-snooping event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger igmp-snooping event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler named-item
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip event keyword

Synopsis	Enter the ip list instance
Context	configure log event-trigger ip event keyword
Tree	ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ip event keyword
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ip event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger ip event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger ip event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger ip event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger ip event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ip event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ip event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ip event <i>keyword</i> entry number debounce value value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec event keyword

Synopsis	Enter the ipsec list instance
Context	configure log event-trigger ipsec event <i>keyword</i>

Tree	ipsec
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ipsec event keyword
Tree	ipsec
Options	tlPsecRUTnlFailToCreate, tlPsecRUSAFailToAddRoute, tlPsecBfdIntfSessStateChgd, tlPsecRadAcctPlcyFailure, tlPsecTrustAnchorPrfOprChg, tlPsecTunnelEncapIpMtuTooSmall, tlPsecRuTnlEncapIpMtuTooSmall, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tlPsecRUTnlRemoved, tlPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ipsec event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description description

Synopsis	Text description
Context	configure log event-trigger ipsec event keyword description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> debounce

Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isis event keyword

Synopsis	Enter the isis list instance
Context	configure log event-trigger isis event <i>keyword</i>
Tree	isis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger isis event <i>keyword</i>
Tree	isis
Options	vRtrIisisSpbNbrMultAdjExists, vRtrIisisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIisisDatabaseOverload, tmnxIisisManualAddressDrops, tmnxIisisCorruptedLSPDetected, tmnxIisisMaxSeqExceedAttempt, tmnxIisisIDLenMismatch, tmnxIisisMaxAreaAdrsMismatch, tmnxIisisOwnLSPPurge, tmnxIisisSequenceNumberSkip, tmnxIisisAutTypeFail, tmnxIisisAuthFail, tmnxIisisVersionSkew, tmnxIisisAreaMismatch, tmnxIisisRejectedAdjacency, tmnxIisisLSPTooLargeToPropagate, tmnxIisisOrigLSPBufSizeMismatch, tmnxIisisProtoSuppMismatch, tmnxIisisAdjacencyChange, tmnxIisisCirclIdExhausted, tmnxIisisAdjRestartStatusChange, tmnxIisisLdpSyncTimerStarted, tmnxIisisLdpSyncExit, tmnxIisisExportLimitReached, tmnxIisisExportLimitWarning, tmnxIisisRoutesExpLmtDropped, tmnxIisisFailureDisabled, tmnxIisisSidError, tmnxIisisSidNotInLabelRange, tmnxIisisRejectedAdjacencySid, tmnxIisisLSPPurge, tmnxIisisPfxLimitOverloadWarning, tmnxIisisAdjBfdSessionSetupFail, tmnxIisisSrgbBadLabelRange, tmnxIisisCircMtuTooLow, tmnxIisisRejectedAdjacencySet, tmnxIisisCorruptRemainingLifetime, tmnxIisisSidStatsIndexAlloc, tmnxIisisFaOperParticipationDown, tmnxIisisRejectedEndXSid, tmnxIisisRejectedPgld, tmnxIisisSrv6LocError, tmnxIisisSrv6StaticSidIfTypeError, tmnxIisisMultiPartTlvTruncated, tmnxIisisMultiPartTlvReceived
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger isis event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger isis event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger isis event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger isis event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger isis event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag event keyword

Synopsis	Enter the lag list instance
Context	configure log event-trigger lag event <i>keyword</i>
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger lag event <i>keyword</i>
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger lag event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger lag event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger lag event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [debounce](#)

Tree [debounce](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [debounce](#) [time](#) *number*

Tree [time](#)

Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lag event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger lag event <i>keyword</i> entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger lag event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lag event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldap [event](#) *keyword*

Synopsis	Enter the ldap list instance
Context	configure log event-trigger ldap event <i>keyword</i>
Tree	ldap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ldap event <i>keyword</i>
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ldap event <i>keyword</i> admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ldap event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger ldap event](#) *keyword* [entry](#) *number* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger ldap event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger ldap event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ldp event keyword

Synopsis	Enter the ldp list instance
Context	configure log event-trigger ldp event keyword
Tree	ldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ldp event keyword
Tree	ldp
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ldp event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
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Context	configure log event-trigger ldp event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ldp event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ldp event keyword entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ldp event keyword entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ldp event keyword entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

filter reference

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger ldp event](#) *keyword* [entry number](#) [filter reference](#)

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger ldp event](#) *keyword* [entry number](#) [handler reference](#)

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lldp event keyword

Synopsis Enter the **lldp** list instance

Context **configure** [log event-trigger lldp event](#) *keyword*

Tree [lldp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger lldp event keyword
Tree	lldp
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger lldp event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger lldp event keyword description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
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Context	configure log event-trigger lldp event keyword entry number
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger lldp event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger lldp event keyword entry number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger lldp event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter

Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword</i> <i>entry number handler reference</i>
Tree	<i>handler</i>
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

logger event keyword

Synopsis	Enter the logger list instance
Context	configure log event-trigger logger event <i>keyword</i>
Tree	<i>logger</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger logger event <i>keyword</i>
Tree	<i>logger</i>
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun, tmnxCustomEvent1,

	tmnxCustomEvent2, tmnxCustomEvent3, tmnxCustomEvent4, tmnxCustomEvent5, tmnxCustomEvent6, tmnxNetconfNotifyOverrun
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger logger event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger logger event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger](#) [logger event](#) [keyword](#) [entry](#) [number](#) [handler](#) [reference](#)

Tree [handler](#)

Reference **configure** [log event-handling](#) [handler](#) [named-item](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

macsec event keyword

Synopsis Enter the **macsec** list instance

Context **configure** [log event-trigger](#) [macsec event](#) [keyword](#)

Tree [macsec](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [macsec event](#) [keyword](#)

Tree [macsec](#)

Options tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete, tmnxMacsecPrimKeychainNoActKey, tmnxMacsecPrimKeychainHasActKey, tmnxMacsecRecovKeychainNoActKey, tmnxMacsecRecovKeychainHasActKey, tmnxMacsecConnAssocCreated, tmnxMacsecConnAssocDeleted

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger macsec event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger macsec event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger macsec event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger macsec event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i> debounce <i>value</i> <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i> handler <i>reference</i>

Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-redundancy [event](#) *keyword*

Synopsis	Enter the mc-redundancy list instance
Context	configure log event-trigger mc-redundancy event <i>keyword</i>
Tree	mc-redundancy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mc-redundancy event <i>keyword</i>
Tree	mc-redundancy
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mc-redundancy event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mc-redundancy event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcpath [event](#) *keyword*

Synopsis	Enter the mcpath list instance
Context	configure log event-trigger mcpath event <i>keyword</i>
Tree	mcpath
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mcpath event <i>keyword</i>
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mcpath event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mcpath event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mcpath event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mcpath event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mcpath event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mcpath event keyword entry number description description
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword entry number filter reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mgmt-core event keyword

Synopsis	Enter the mgmt-core list instance
Context	configure log event-trigger mgmt-core event <i>keyword</i>
Tree	mgmt-core
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger mgmt-core event](#) *keyword*

Tree [mgmt-core](#)

Options none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange, mdAutomaticRollbackFailed, mdRollbackFailed

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger mgmt-core event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger mgmt-core event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger mgmt-core event](#) *keyword* [entry number](#) [debounce time number](#)

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

value *number*

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** [log event-trigger mgmt-core event](#) *keyword* [entry number](#) [debounce value number](#)

Tree [value](#)

Range 2 to 15

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger mgmt-core event](#) *keyword* [entry number](#) [description description](#)

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mirror [event](#) *keyword*

Synopsis	Enter the mirror list instance
Context	configure log event-trigger mirror event <i>keyword</i>
Tree	mirror
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger mirror event <i>keyword</i>
Tree	mirror
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpV6FilterChange, tMirrorSapUnavailSath, tMirrorSapUnavailSathClr, tMirrorFltrUnavailSath, tMirrorFltrUnavailSathClr, tMirrorPortUnavailSath, tMirrorPortUnavailSathClr
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mirror event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mirror event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i>
Tree	entry

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>

Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld event keyword

Synopsis	Enter the mld list instance
Context	configure log event-trigger mld event <i>keyword</i>
Tree	mld
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mld event <i>keyword</i>
Tree	mld
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlcyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mld event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mld event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i>

Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld-snooping [event](#) *keyword*

Synopsis	Enter the mld-snooping list instance
Context	configure log event-trigger mld-snooping event <i>keyword</i>
Tree	mld-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mld-snooping event <i>keyword</i>
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mld-snooping event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable

Introduced25.3.R2

Platforms7705 SAR Gen 2

description *description*

SynopsisText description

Context**configure** [log event-trigger mld-snooping event](#) *keyword* [description](#) *description*

Tree[description](#)

String length1 to 80

String format'string-not-all-spaces' must contain at least one non-space character

Introduced25.3.R2

Platforms7705 SAR Gen 2

entry [[id](#)] *number*

SynopsisEnter the **entry** list instance

Context**configure** [log event-trigger mld-snooping event](#) *keyword* [entry](#) *number*

Tree[entry](#)

Introduced25.3.R2

Platforms7705 SAR Gen 2

[id] *number*

SynopsisID of the EHS event trigger entry

Context**configure** [log event-trigger mld-snooping event](#) *keyword* [entry](#) *number*

Tree[entry](#)

Range1 to 1500

NotesThis element is part of a list key.

Introduced25.3.R2

Platforms7705 SAR Gen 2

admin-state *keyword*

SynopsisAdministrative state of the EHS event trigger entry

Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls event keyword

Synopsis	Enter the mpls list instance
Context	configure log event-trigger mpls event keyword
Tree	mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mpls event keyword
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResignaled, vRtrMplsP2mplInstanceUp, vRtrMplsP2mplInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResignaled, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mplInstanceResignaled, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInlgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted, vRtrMplsNodeInlgpOverloadIpv6, tmnxMplsResourceHighUsage, tmnxMplsResourceExhausted, tmnxMplsResourceRecovered, vRtrMplsLspContOptStarted, vRtrMplsLspContMaxLspsExceeded, vRtrMplsLspContMinLspsExceeded
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mpls event keyword admin-state keyword
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mpls event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger mpls event keyword entry number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mpls event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mpls event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mpls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mpls event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-tp event keyword

Synopsis	Enter the mpls-tp list instance
Context	configure log event-trigger mpls-tp event keyword
Tree	mpls-tp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mpls-tp event keyword
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mpls-tp event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger mpls-tp event keyword description description
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry number debounce description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ntp event *keyword*

Synopsis Enter the **ntp** list instance

Context **configure** [log event-trigger ntp event](#) *keyword*

Tree [ntp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ntp event <i>keyword</i>
Tree	ntp
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ntp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ntp event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ntp event <i>keyword</i> entry <i>number</i>

Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ntp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
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Context	configure log event-trigger ntp event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ntp event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ntp event <i>keyword</i> entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Description	This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oam event keyword

Synopsis	Enter the oam list instance
Context	configure log event-trigger oam event <i>keyword</i>
Tree	oam
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger oam event <i>keyword</i>
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcIdInvalid, svcIdWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout,

	tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger oam event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger oam event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger oam event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ospf event keyword

Synopsis Enter the **ospf** list instance

Context **configure** [log event-trigger ospf event](#) *keyword*

Tree [ospf](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger ospf event](#) *keyword*

Tree [ospf](#)

Options tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError,

tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning,
 tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail,
 tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet,
 tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate,
 tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown,
 tmnxOspfNgNbrStrictBfdBlocked

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger ospf event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger ospf event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger ospf event](#) *keyword* **entry** *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger ospf event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger ospf event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger ospf event](#) *keyword* [entry](#) *number* [debounce](#)

Tree [debounce](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger ospf event](#) *keyword* [entry](#) *number* [debounce](#) [time](#) *number*

Tree [time](#)

Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcap [event](#) *keyword*

Synopsis	Enter the pcap list instance
Context	configure log event-trigger pcap event <i>keyword</i>
Tree	pcap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pcap event <i>keyword</i>
Tree	pcap
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
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Context	configure log event-trigger pcap event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pcap event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger pcap event](#) *keyword* [entry](#) *number* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger pcap event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger pcap event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pcep event *keyword*

Synopsis	Enter the pcep list instance
Context	configure log event-trigger pcep event <i>keyword</i>
Tree	pcep
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	PCEP module events
Context	configure log event-trigger pcep event <i>keyword</i>
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pcep event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pcep event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> debounce

Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pcep event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pfc](#) [event](#) *keyword*

Synopsis	Enter the pfc list instance
Context	configure log event-trigger pfc event <i>keyword</i>
Tree	pfc
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	PFCE events
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Context	configure log event-trigger pfc event <i>keyword</i>
Tree	pfc
Options	none, tmnxPfcInvalidId, tmnxPfcNoSuchCalltraceProfile, tmnxPfcNoSecondaryInterface
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pfc event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pfc event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pfc event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pfcv event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pfcv event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pfcv event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pfcv event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced	25.10.R1
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pfcg event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pfcg event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pfcg event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger pfcv event](#) *keyword entry number handler reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

pim event keyword

Synopsis Enter the **pim** list instance

Context **configure** [log event-trigger pim event](#) *keyword*

Tree [pim](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger pim event](#) *keyword*

Tree [pim](#)

Options vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pim event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pim event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>

Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler

Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim-snooping [event](#) *keyword*

Synopsis	Enter the pim-snooping list instance
Context	configure log event-trigger pim-snooping event <i>keyword</i>
Tree	pim-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pim-snooping event <i>keyword</i>
Tree	pim-snooping
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pim-snooping event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger pim-snooping event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [event](#) *keyword*

Synopsis	Enter the port list instance
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Context	configure log event-trigger port event <i>keyword</i>
Tree	port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger port event <i>keyword</i>
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulpit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimChange, tmnxPortEtherLoopbackStarted, tmnxPortEtherLoopbackStopped, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear, SFPStatusInvalidFormFactor, SFPStatusModuleFault, tmnxDS0ChanGrpLoopbackStarted, tmnxDS0ChanGrpLoopbackStopped, tmnxResvPoolUseThreshExcd, tmnxResvPoolUseThreshNotExcd, tmnxTotalPoolUseThreshExcd, tmnxTotalPoolUseThreshNotExcd, tmnxSharedPoolUseThreshExcd, tmnxSharedPoolUseThreshNotExcd, tmnxEqPortFlexEGroupAlrm, tmnxEqPortFlexEGroupAlrmClr, tmnxEqPortFlexEMemberAlrm, tmnxEqPortFlexEMemberAlrmClr, tmnxEqPortFlexEMbrPhyInstAlrm, tmnxEqPortFlexEMbrPhyInstAlrmClr,

	tmnxEqPortDataChanAlarm, tmnxEqPortDataChanAlarmClear, tmnxEqPortDataLoopbackStarted, tmnxEqPortDataLoopbackStopped, tmnxEqPortRs232LoopbackStarted, tmnxEqPortRs232LoopbackStopped, tmnxEqPortRS232Alarm, tmnxEqPortRS232AlarmClear
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger port event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger port event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger](#) [port event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling](#) [handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ptp event keyword

Synopsis Enter the **ptp** list instance

Context **configure** [log event-trigger](#) [ptp event](#) *keyword*

Tree [ptp](#)

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [ptp event](#) *keyword*

Tree [ptp](#)

Options tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpTimeRecoveryStateChange, tmnxPtpPeerNoTxTimestamping, tmnxPtpPeerNoTxTimestampingClear, tmnxPtpPeerNoRxTimestamping, tmnxPtpPeerNoRxTimestampingClear

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ptp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Text description
Context	configure log event-trigger ptp event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>

Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Text description
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler

Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

python [event](#) *keyword*

Synopsis	Enter the python list instance
Context	configure log event-trigger python event <i>keyword</i>
Tree	python
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Python module events
Context	configure log event-trigger python event <i>keyword</i>
Tree	python
Options	tmnxPythonInterpreterRestarted, tmnxPythonPreComScrStarted, tmnxPythonPreComScrFinished, tmnxPythonPostComScrStarted, tmnxPythonPostComScrFinished, tmnxPythonPreComScrSkipped, tmnxPythonPostComScrSkipped
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger python event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger python event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger python event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius [event](#) *keyword*

Synopsis	Enter the radius list instance
Context	configure log event-trigger radius event <i>keyword</i>
Tree	radius
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [radius event](#) *keyword*

Tree [radius](#)

Options tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [radius event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger](#) [radius event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter

Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger radius event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rip event keyword

Synopsis	Enter the rip list instance
Context	configure log event-trigger rip event <i>keyword</i>
Tree	rip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rip event <i>keyword</i>
Tree	rip
Options	ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rip event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger rip event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
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Context	configure log event-trigger rip event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rip event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rip event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ripng [event](#) *keyword*

Synopsis	Enter the ripng list instance
Context	configure log event-trigger ripng event <i>keyword</i>
Tree	ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ripng event <i>keyword</i>
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ripng event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ripng event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-policy event keyword

Synopsis	Enter the route-policy list instance
Context	configure log event-trigger route-policy event keyword
Tree	route-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger route-policy event keyword
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger route-policy event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure log event-trigger route-policy event keyword description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger route-policy event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger route-policy event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger route-policy event](#) *keyword* [entry](#) *number* **admin-state** *keyword*
Tree [admin-state](#)
Options enable, disable
Default enable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpki event keyword

Synopsis	Enter the rpki list instance
Context	configure log event-trigger rpki event <i>keyword</i>
Tree	rpki
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger rpki event <i>keyword</i>
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rpki event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger rpki event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger rpki event](#) *keyword* [entry number handler reference](#)

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rsvp [event](#) *keyword*

Synopsis Enter the **rsvp** list instance

Context **configure** [log event-trigger rsvp event](#) *keyword*

Tree [rsvp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger rsvp event](#) *keyword*

Tree [rsvp](#)

Options vRtrRsvpStateChange, vRtrRsvpIfStateChange, vRtrRsvpIfNbrStateUp, vRtrRsvpIfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger rsvp event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger rsvp event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger](#) [rsvp event](#) *keyword* [entry](#) *number* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger](#) [rsvp event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger](#) [rsvp event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling](#) [handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

security event keyword

Synopsis	Enter the security list instance
Context	configure log event-trigger security event keyword
Tree	security
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger security event keyword
Tree	security
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp,

tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf,
 tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid,
 tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning,
 tmnxCAProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning,
 tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared,
 tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning,
 tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid,
 tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed,
 tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess,
 tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail,
 tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime,
 tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,
 tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid,
 tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login,
 grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts,
 netconf_user_login, netconf_user_logout, netconf_user_login_failed,
 netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify,
 tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid,
 tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io,
 md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired,
 netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen,
 tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied,
 tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin,
 tmnxSSHSessionFailed, tmnxSecSignedSwCpmBootEvent,
 tSecSgndSwUefiVarsUpdtReqd, tmnxPkiCertUpdUpdateStarted,
 tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed,
 tmnxSystemPasswordChangedByAdmin, tmnxSysLicenseCleared,
 tmnxSysLicensingStateOk, tmnxPkiCertChainCompareCaNoMatch,
 ssh_auth_key_gen, ssh_auth_key_synch_fail, tmnxSSHListeningPortChanged,
 tmnxTelnetListeningPortChanged, tmnxSSHListeningPortOccupied,
 tmnxTelnetListeningPortOccupied, tmnxSSHListeningPortInUse,
 tmnxTelnetListeningPortInUse, tmnxSysSwDSValidationResult,
 tacplusUserProfileInvalid, tmnxSSHInvalidPacketLength,
 tmnxSecureBootDisabledAlarm, tmnxSecSignedSwSatBootEvent,
 tacplusSingleConnNotSupported, fileCreatedByUser, fileDeletedByUser,
 fileModifiedByUser, fileCopiedByUser, fileMovedByUser, SSH_client_preserve_key_fail

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state keyword

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger security event](#) keyword **admin-state** keyword

Tree [admin-state](#)

Options enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger security event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger security event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp event *keyword*

Synopsis	Enter the snmp list instance
Context	configure log event-trigger snmp event <i>keyword</i>
Tree	snmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger snmp event <i>keyword</i>
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, hcRisingAlarm, hcFallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger snmp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger snmp event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** **log event-trigger snmp event** *keyword* **entry** *number*

Tree **entry**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** **log event-trigger snmp event** *keyword* **entry** *number*

Tree **entry**

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** **log event-trigger snmp event** *keyword* **entry** *number* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger snmp event <i>keyword entry number filter reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger snmp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-mpls [event](#) *keyword*

Synopsis	Enter the sr-mpls list instance
Context	configure log event-trigger sr-mpls event <i>keyword</i>
Tree	sr-mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	SR MPLS event
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Context	configure log event-trigger sr-mpls event <i>keyword</i>
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure, tmnxSrMplsPfxSidFlexAlgoFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger sr-mpls event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger sr-mpls event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> debounce <i>value</i> <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger sr-mpls event](#) *keyword* [entry number](#) [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sr-policy [event](#) *keyword*

Synopsis Enter the **sr-policy** list instance

Context **configure** [log event-trigger sr-policy event](#) *keyword*

Tree [sr-policy](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Events for SR policy module

Context **configure** [log event-trigger sr-policy event](#) *keyword*

Tree [sr-policy](#)

Options vRtrSrPathIsCandPathOperChanged, vRtrSrPlcyPathActiveStateChanged

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger sr-policy event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger sr-policy event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger sr-policy event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp event keyword

Synopsis	Enter the stp list instance
Context	configure log event-trigger stp event keyword
Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger stp event keyword
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger stp event keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger stp event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger stp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger stp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger stp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger stp event keyword entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger stp event keyword entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger stp event keyword entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure log event-trigger stp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger stp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger stp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

svcmgr [event](#) *keyword*

Synopsis	Enter the svcmgr list instance
Context	configure log event-trigger svcmgr event <i>keyword</i>

Tree	svcmgr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger svcmgr event <i>keyword</i>
Tree	svcmgr
Options	<p> svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTbIfFullAlarmRaised, svcTlsMrpAttrTbIfFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd, svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd, svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd, svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd, svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, svcEvpnMHPortActEsDFStateChgd, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChange, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged, dynamicSdpBindConfigChanged, dynamicSdpCreationFailed, dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged, sdpBindIpPipeCelpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped, sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected, </p>

svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,
svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,
svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,
svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,
svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,
sdpBindReceivedPbbProtSrcMac, svcSrv6TEPHiUsageRaised,
svcSrv6TEPHiUsageCleared, svcTlsMfibTableFullAlarmRaised,
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPlcyFailure,
tmnxSubMcsRelatedProblem, tmnxSubAuthPlcyRadSerOperStatChg,
tmnxSubAcctPlcyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,
tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,
tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,
tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,
svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,
svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,
svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,
sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,
svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,
tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,
svcTlsGroupOperStatusChanged, sapTunnelStateChange,
tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig,
svcOperGrpOperStatusChanged, sapIpceCelpAddrChange,
svcMSPwRetryExpiredNotif, svcVllSiteDesigFwdrChg, tmnxSubSlaacSetupFailure,
tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,
tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,
tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,
tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange,
tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,
tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,
tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,
tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,
tmnxSubBrgRadiusUpdateIpoeSeFail, tmnxSubBrgRadiusCoaError,
tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,
tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected,
alulpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError,
tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,
tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd,
svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed,
tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd,
tmnxSubInfoEgrAggRateLimitLowReq, tmnxSublpoeWppRegistrationFailed,

svcEvpnMplsTEPlpSysHiUsgSet, svcEvpnMplsTEPlpSysHiUsgClr,
 svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict,
 svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr,
 svcIfSubForwardingStatsDisNotify, svcIfSubForwardingStatsEnNotify,
 svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet,
 svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange,
 svcEvpnMplsMldpESLbIHUsgSet, svcEvpnMplsMldpESLbIHUsgClr,
 svcTlsProxyArpUnauthorizedIP, svcTlsProxyNdUnauthorizedIP,
 svcRvplsEvpnMcastDestSysHiUsgSet, svcRvplsEvpnMcastDestSysHiUsgClr,
 tmnxSubPysrosExec, tmnxSubPysrosExecFail, svcEvpnVxInstMHStandbyStatusChg,
 sapCemAsymDelayControlEventStart, sapCemAsymDelayControlEventStop,
 sapCemActMultPathStateChg

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger svcmgr event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger svcmgr event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
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Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number filter reference
Tree	filter

Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system event keyword

Synopsis	Enter the system list instance
Context	configure log event-trigger system event <i>keyword</i>
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger system event <i>keyword</i>
Tree	system
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold,

tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, tmnxLastSystemRebootAdmin, mdCommitInProgress, mdCommitSucceeded, tmnxSysNtcnfListenPortOccupied, tmnxSysNtcnfListenOperStateChngd, tmnxSysNtcnfSessionDropped

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger system event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context	configure log event-trigger system event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger system event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger system event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger system event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger system event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger system event <i>keyword</i> entry number debounce description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls [event](#) *keyword*

Synopsis	Enter the tls list instance
Context	configure log event-trigger tls event <i>keyword</i>
Tree	tls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger tls event <i>keyword</i>
Tree	tls
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure, tmnxTlsSANCheckStatus
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger tls event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger tls event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i>
Tree	entry

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number*
Tree [entry](#)
Range 1 to 1500
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number* **admin-state** *keyword*
Tree [admin-state](#)
Options enable, disable
Default enable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

debounce

Synopsis Enter the **debounce** context
Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number* **debounce**
Tree [debounce](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

time *number*

Synopsis Time window for events for EHS to trigger a response
Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number* **debounce** **time** *number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>

Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user [event](#) *keyword*

Synopsis	Enter the user list instance
Context	configure log event-trigger user event <i>keyword</i>
Tree	user
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger user event <i>keyword</i>
Tree	user
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger user event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger user event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>

Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger user event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler

Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp event *keyword*

Synopsis	Enter the vrrp list instance
Context	configure log event-trigger vrrp event <i>keyword</i>
Tree	vrrp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger vrrp event <i>keyword</i>
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger vrrp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [log event-trigger vrrp event](#) *keyword* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger vrrp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger vrrp event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger vrrp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrtr [event](#) *keyword*

Synopsis	Enter the vrtr list instance
Context	configure log event-trigger vrtr event <i>keyword</i>

Tree	vrtr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger vrtr event <i>keyword</i>
Tree	vrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCISetDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CISetDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, tmnxVRtrBfdMultiHopFpMismatch, vRtrBgplInstanceError, vrtrIfpTunnelOperStateChange, tmnxVRtrBfdExtModifTxIntrvl, tmnxVRtrBfdSessParamConflict, tmnxVRtrBfdSessIntvlNoHwOffload
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger vrtr event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger vrtr event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger vrtr event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger vrtr event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger vrtr event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger vrtr event <i>keyword</i> entry number debounce value <i>number</i>

Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger vrtr event <i>keyword</i> entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Description	<p>This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.</p> <p>It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the configure log event-trigger context.</p>
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler

Reference	configure log event-handling handler <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wlan-gw [event](#) *keyword*

Synopsis	Enter the wlan-gw list instance
Context	configure log event-trigger wlan-gw event <i>keyword</i>
Tree	wlan-gw
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger wlan-gw event <i>keyword</i>
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh, tmnxWlanGwGtpUpPeerRtUnreach
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger wlan-gw event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger wlan-gw event <i>keyword</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* [entry](#) *number* [description](#) *description*
 Tree [description](#)
 String length 1 to 80
 String format 'string-not-all-spaces' must contain at least one non-space character
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.
 It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.
 Reference **configure** [log filter](#) *log-filter-name*
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *named-item*
 Introduced 25.3.R2

Platforms 7705 SAR Gen 2

wpp event *keyword*

Synopsis Enter the **wpp** list instance

Context **configure** **log event-trigger wpp event** *keyword*

Tree **wpp**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** **log event-trigger wpp event** *keyword*

Tree **wpp**

Options tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log event-trigger wpp event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** **log event-trigger wpp event** *keyword* **description** *description*

Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

filter reference

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger wpp event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree [filter](#)

Description This command configures the log filter to be used for this trigger entry. The log filter defines the matching criteria that must be met for the log event to trigger the handler execution. The log filter is applied to the log event and, if the filtering decision results in a forward action, the handler is triggered.

It is typically unnecessary to configure match criteria for the application or number in the log filter used for EHS because the particular filter is only applied for a specific log event application and number, as configured under the **configure log event-trigger** context.

Reference **configure** [log filter](#) *log-filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

handler reference

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger wpp event](#) *keyword* [entry](#) *number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

file [\[file-policy-name\]](#) *file-policy-name*

Synopsis Enter the **file** list instance

Context **configure** [log file](#) *file-policy-name*

Tree [file](#)

Max. instances 99

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[file-policy-name] *file-policy-name*

Synopsis	File ID for a log or accounting file
Context	configure log file <i>file-policy-name</i>
Tree	file
Description	This command specifies the identification name or number for a log or accounting file. If the name begins with a numerical digit (from 1 to 9), the name must be a number from 1 to 99.
String length	1 to 64
String format	'file-policy-name' must be numeric 1..99 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

compact-flash-location

Synopsis	Enter the compact-flash-location context
Context	configure log file <i>file-policy-name</i> compact-flash-location
Tree	compact-flash-location
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup *keyword***WARNING:**

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

Synopsis	Log file location
Context	configure log file <i>file-policy-name</i> compact-flash-location backup <i>keyword</i>
Tree	backup
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary *keyword***WARNING:**

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

Synopsis	Log file location
Context	configure log file <i>file-policy-name</i> compact-flash-location primary <i>keyword</i>
Tree	primary
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log file <i>file-policy-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format *keyword*

Synopsis	Format used to output messages in the file
Context	configure log file <i>file-policy-name</i> format <i>keyword</i>
Tree	format
Description	<p>This command configures the output format of the log events in the file. Changing the format immediately affects the next log event written to the currently open log file.</p> <p>The standard option uses the standard SR OS log event format. The sequence number is the first field of each event.</p> <p>The rfc5424 option uses an RFC 5424 syslog format with the system name as the HOSTNAME. The PRI value is the first field of each event, and the log-prefix is empty.</p>
Options	<p>standard – Use the standard SR OS log event format</p> <p>rfc5424 – Use an RFC 5424 syslog format</p>

Default	standard
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention *number*

Synopsis	Minimum time that a file is retained on the media
Context	configure log file <i>file-policy-name</i> retention <i>number</i>
Tree	retention
Range	1 to 500
Units	hours
Default	12
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rollover *number*

Synopsis	Frequency at which a new log or accounting file is created
Context	configure log file <i>file-policy-name</i> rollover <i>number</i>
Tree	rollover
Range	5 to 10080
Units	minutes
Default	1440
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

file-storage-control

Synopsis	Enter the file-storage-control context
Context	configure log file-storage-control
Tree	file-storage-control
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-files-total-size *number*

Synopsis	Per CF total accounting file storage limit
Context	configure log file-storage-control accounting-files-total-size <i>number</i>
Tree	accounting-files-total-size
Description	<p>This command configures the limit for the total space that all accounting files can occupy on each storage device on the active CPM.</p> <p>When this threshold is reached, new accounting files are no longer created in the \act-collect directory of the storage device until SR OS removes older accounting files from the \act directory and the occupancy is below the limit. Currently open, in-progress accounting files in the \act-collect directory are not affected by this limit and are completed.</p> <p>When unconfigured, there is no specific limit for the total size of all accounting files.</p> <p>Only accounting files in the \act directory with system generated names (including no file extension) are applicable toward the total size limit.</p> <p>If a user manually adds or deletes accounting files from the \act directory, the size of the files is not taken into account for up to 1 hour.</p> <p>The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed compact flash (CF) device, the limit is never reached.</p>
Range	50 to 4194304
Units	megabytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-files-total-size *number*

Synopsis	Per CF total log file storage limit
Context	configure log file-storage-control log-files-total-size <i>number</i>
Tree	log-files-total-size
Description	<p>This command configures the limit for the total space that all log files can occupy on each storage device on the active CPM.</p> <p>When this threshold is reached, log events are no longer written to the files in the \log directory until SR OS removes older log files and the occupancy is below the limit.</p> <p>When unconfigured, there is no specific limit for the total size of all log files.</p> <p>Only log files in the \log directory with system generated names (including no file extension) are applicable toward the total size limit.</p> <p>If a user manually adds or deletes log files from the \log directory, the size of the files is not taken into account for up to 1 hour.</p>

The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed CF device, the limit is never reached.

Range	50 to 4194304
Units	megabytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *[filter-name] log-filter-name*

Synopsis	Enter the filter list instance
Context	configure log filter <i>log-filter-name</i>
Tree	filter
Max. instances	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *log-filter-name*

Synopsis	Filter name
Context	configure log filter <i>log-filter-name</i>
Tree	filter
String length	1 to 64
String format	'log-filter-name' must be numeric 1..1500 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Default action for the event filter
Context	configure log filter <i>log-filter-name</i> default-action <i>keyword</i>
Tree	default-action
Options	drop, forward

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** [log filter](#) *log-filter-name* [description](#) *description*
Tree [description](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

named-entry [[entry-name](#)] *log-filter-entry-name*

Synopsis Enter the **named-entry** list instance
Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name*
Tree [named-entry](#)
Description Commands in this context create or edit an event filter entry.
Max. instances 999
Notes This element is ordered by the user.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[entry-name] *log-filter-entry-name*

Synopsis Entry name
Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name*
Tree [named-entry](#)
String length 1 to 64
String format 'log-filter-entry-name' must be numeric 1..999 or alphanumeric not starting with underscore and without trailing spaces
Notes This element is part of a list key.
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

action *keyword*

Synopsis Action for this event filter entry

Context **configure log filter** *log-filter-name* *named-entry* *log-filter-entry-name* **action** *keyword*

Tree **action**

Options drop, forward

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure log filter** *log-filter-name* *named-entry* *log-filter-entry-name* **description** *description*

Tree **description**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

match

Synopsis Enter the **match** context

Context **configure log filter** *log-filter-name* *named-entry* *log-filter-entry-name* **match**

Tree **match**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

application

Synopsis Enter the **application** context

Context **configure log filter** *log-filter-name* *named-entry* *log-filter-entry-name* **match** **application**

Tree **application**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

eq keyword

Synopsis Application to match

Context **configure** **log filter** *log-filter-name* **named-entry** *log-filter-entry-name* **match** **application** **eq** *keyword*

Tree **eq**

Options application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfcp, tree-sid, srv6, sr-mpls, anysec

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

neq keyword

Synopsis Application to be filtered out

Context **configure** **log filter** *log-filter-name* **named-entry** *log-filter-entry-name* **match** **application** **neq** *keyword*

Tree **neq**

Options application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfcp, tree-sid, srv6, sr-mpls, anysec

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event

Synopsis	Enter the event context
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event
Tree	event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Log event message to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event eq <i>number</i>
Tree	eq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Number of the log event to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event gt <i>number</i>
Tree	gt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gte *number*

Synopsis	Number of the log event to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event gte <i>number</i>
Tree	gte

Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Number of the log event to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event lt <i>number</i>
Tree	lt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lte *number*

Synopsis	Number of the log event to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event lte <i>number</i>
Tree	lte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq *number*

Synopsis	Log event message to filter out
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event neq <i>number</i>
Tree	neq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

message

Synopsis Enter the **message** context
Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name* [match message](#)
Tree [message](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

eq string

Synopsis Log event message to match
Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name* [match message eq](#) *string*
Tree [eq](#)
String length 1 to 400
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

neq string

Synopsis Log event message to be filtered out
Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name* [match message](#) [neq string](#)
Tree [neq](#)
String length 1 to 400
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

regex boolean

Synopsis String comparison to determine if the log event matches the value of pattern

Context	configure log filter <i>log-filter-name</i> <i>named-entry</i> <i>log-filter-entry-name</i> match message <i>regex</i> <i>boolean</i>
Tree	<i>regex</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity

Synopsis	Enter the severity context
Context	configure log filter <i>log-filter-name</i> <i>named-entry</i> <i>log-filter-entry-name</i> match severity
Tree	<i>severity</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq keyword

Synopsis	Log event severity level to match
Context	configure log filter <i>log-filter-name</i> <i>named-entry</i> <i>log-filter-entry-name</i> match severity eq <i>keyword</i>
Tree	<i>eq</i>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt keyword

Synopsis	Log event severity level
Context	configure log filter <i>log-filter-name</i> <i>named-entry</i> <i>log-filter-entry-name</i> match severity gt <i>keyword</i>
Tree	<i>gt</i>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gte keyword

Synopsis Log event severity level

Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name* [match severity gte keyword](#)

Tree [gte](#)

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lt keyword

Synopsis Log event severity level

Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name* [match severity lt keyword](#)

Tree [lt](#)

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lte keyword

Synopsis Log event severity level

Context **configure** [log filter](#) *log-filter-name* [named-entry](#) *log-filter-entry-name* [match severity lte keyword](#)

Tree [lte](#)

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

neq *keyword*

Synopsis	Log event severity level to filter out
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity neq <i>keyword</i>
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject

Synopsis	Enter the subject context
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject
Tree	subject
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *named-item*

Synopsis	Log event subject string to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject eq <i>named-item</i>
Tree	eq
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq *named-item*

Synopsis	Log event subject string to filter out
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject neq <i>named-item</i>

Tree	neq
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

regex *boolean*

Synopsis	String comparison to determine if the log event matches the value of subject
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject regex <i>boolean</i>
Tree	regex
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrtr-name

Synopsis	Enter the vrtr-name context
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match vrtr-name
Tree	vrtr-name
Description	Commands in this context configure the criteria for the name of a router instance. The vrtr-name is a name for a router instance, in a special format, used in the logging system. Examples of names include Base and vprn101, where 101 is the service ID of the VPRN service. The name represents the router instance that generated the log event.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *named-item*

Synopsis	Log event router instance to match
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match vrtr-name eq <i>named-item</i>
Tree	eq

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq *named-item*

Synopsis	Log event router instance to filter out
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match <i>vrtr-name</i> neq <i>named-item</i>
Tree	neq
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

regex *boolean*

Synopsis	Match the router instance string
Context	configure log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match <i>vrtr-name</i> regex <i>boolean</i>
Tree	regex
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-events

Synopsis	Enter the log-events context
Context	configure log log-events
Tree	log-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adp event keyword

Synopsis	Enter the adp list instance
Context	configure log log-events adp event keyword
Tree	adp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events adp event keyword
Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events adp event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events adp event keyword repeat boolean
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events adp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events adp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events adp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events adp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events adp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-prov [event](#) *keyword*

Synopsis	Enter the auto-prov list instance
Context	configure log log-events auto-prov event <i>keyword</i>
Tree	auto-prov
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events auto-prov event <i>keyword</i>
Tree	auto-prov
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events auto-prov event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events auto-prov event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events auto-prov event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events auto-prov event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events auto-prov event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events auto-prov event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events auto-prov event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd [event](#) *keyword*

Synopsis	Enter the bfd list instance
Context	configure log log-events bfd event <i>keyword</i>
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bfd event <i>keyword</i>
Tree	bfd
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events bfd event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bfd event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events bfd event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events bfd event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events bfd event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events bfd event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events bfd event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp [event](#) *keyword*

Synopsis	Enter the bgp list instance
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Context	configure log log-events bgp event <i>keyword</i>
Tree	bgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bgp event <i>keyword</i>
Tree	bgp
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events bgp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bgp event <i>keyword</i> repeat <i>boolean</i>

Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events bgp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events bgp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events bgp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events bgp event <i>keyword specific-throttle-limit number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events bgp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chassis event keyword

Synopsis	Enter the chassis list instance
Context	configure log log-events chassis event <i>keyword</i>
Tree	chassis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events chassis event <i>keyword</i>
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSyncIfTimingHoldover, tmnxEqSyncIfTimingHoldoverClear, tmnxEqSyncIfTimingRef1Alarm, tmnxEqSyncIfTimingRef1AlarmClear, tmnxEqSyncIfTimingRef2Alarm, tmnxEqSyncIfTimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSyncIfTimingBITSAlarm, tmnxEqSyncIfTimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent,

tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm,
tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd,
tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch,
tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark,
tmnxIPseclsaGrpTnlMax, tmnxEqSynclfTimingRef1Quality,
tmnxEqSynclfTimingRef2Quality, tmnxEqSynclfTimingBITSQuality,
tmnxEqSynclfTimingBITS2Quality, tmnxEqSynclfTimingRefSwitch,
tmnxEqSynclfTimingBITS2Alarm, tmnxEqSynclfTimingBITS2AlarmClr,
tmnxEqSynclfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent,
tmnxEqSynclfTimingSystemQuality, tmnxEqHwEnhancedCapability,
tmnxEqSynclfTimingPTPQuality, tmnxEqSynclfTimingPTPAlarm,
tmnxEqSynclfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning,
tmnxMDAlsaTunnelGroupChange, tmnxEqPowerCapacityExceeded,
tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity,
tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState,
tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent,
tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent,
tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent,
tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear,
tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear,
tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear,
tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm,
tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource,
tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr,
tmnxPlcyAcctStatsEventOvrflw, tmnxlomResHighLimitReached,
tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow,
tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact,
tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail,
tmnxEqMdaIngrXplError, tmnxSynclfTimBITS2048khzUnsup,
tmnxSynclfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise,
tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,
tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,
tmnxEqPhysChassPowerSupOutFailClr, tmnxEqPhysChassisFanFailure,
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,
tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr,
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,

tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,
tmnxIPv6CpmFilterOverloadClear, tmnxGnssAcquiringFix, tmnxGnssAcquiredFix,
tmnxPhysChassisPMOutFail, tmnxPhysChassisPMOutFailClr,
tmnxPhysChassisPMInputFeed, tmnxPhysChassisPMInputFeedClr,
tmnxPhysChassisFilterDoorOpen, tmnxPhysChassisFilterDoorClosed,
tmnxPhysChassisPMOverTemp, tmnxPhysChassisPMOverTempClr,
tmnxEqFpgaSoftError, tmnxEqSynclfTimingSyncEQuality,
tmnxEqSynclfTimingSyncE2Quality, tmnxEqSynclfTimingSyncEAlarm,
tmnxEqSynclfTimingSyncEAlarmClr, tmnxEqSynclfTimingSyncE2Alarm,
tmnxEqSynclfTimingSyncE2AlarmClr, tmnxEqHwEventDetected,
tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered, tmnxEsaConnected,
tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,
tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,
tmnxIPv6FilterEgrNearFullClear, tmnxEsaStolenTimeDetected,
tmnxEsaHwStatusDegraded, tmnxEsaHwStatusDegradedClr,
tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr, tmnxEsaHwPwrSup1Degraded,
tmnxEsaHwPwrSup1DegradedClr, tmnxEsaHwPwrSup1Failed,
tmnxEsaHwPwrSup1FailedClr, tmnxEsaHwPwrSup2Degraded,
tmnxEsaHwPwrSup2DegradedClr, tmnxEsaHwPwrSup2Failed,
tmnxEsaHwPwrSup2FailedClr, tmnxEsaHwFanBankNonRedun,
tmnxEsaHwFanBankNonRedunClr, tmnxEsaHwFanBankFailRedun,
tmnxEsaHwFanBankFailRedunClr, tmnxEsaHwFanStatusDegraded,
tmnxEsaHwFanStatusDegradedClr, tmnxEsaHwFanStatusFailed,
tmnxEsaHwFanStatusFailedClr, tmnxEsaHwPwrSupMismatch,
tmnxEsaHwPwrSupMismatchClr, tmnxEsaHwPwrSupBankNonRedun,
tmnxEsaHwPwrSupBankNonRedunClr, tmnxEsaHwPwrSupBankFailRedun,
tmnxEsaHwPwrSupBankFailRedunClr, tmnxEsaHwTemperatureDegraded,
tmnxEsaHwTemperatureDegradedClr, tmnxEsaHwTemperatureFailed,
tmnxEsaHwTemperatureFailedClr, tmnxPowerSupplyFanFailed,
tmnxPowerSupplyFanFailedClear, tmnxLxrResourceHighUsage,
tmnxLxrResourceExhausted, tmnxLxrResourceRecovered,
tmnxLxrResourceHighUsageByOwner, tmnxLxrResourceExhaustedByOwner,
tmnxLxrResourceRecoveredByOwner, tmnxSasAlarminput1StateChanged,
tmnxSasAlarminput2StateChanged, tmnxSasAlarminput3StateChanged,
tmnxSasAlarminput4StateChanged, tmnxAlarmInputVoltageFailure,

tmnxlomRsrcUsageHighLimitReached, tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered, tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr, tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscrbdClr, tmnxInterChassisCommsDown, tmnxInterChassisCommsUp, tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted, tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort, tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure, CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError, CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure, tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp, tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure, SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError, SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure, tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear, tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp, tmnxEqCardMissing, tmnxEqCardMissingClear, tmnxEqEsaHostPortCrcAlarm, tmnxEqEsaHostPortCrcAlarmClear, tmnxEsaFirmwareUpgradeInProgress, tmnxEsaFirmwareUpgradeDone, tmnxEsaFirmwareUpgradeFailed, tmnxChassisAntiTheftModeBoot, tmnxChassisAntiTheftUnlocked, tmnxEqLowPowerSwFabModeEnabled, tmnxEqLowPowerSwFabModeDisabled, tmnxChassisGoldenStatusEvent, tmnxEqFlashDiskFormatStart, tmnxEqFlashDiskFormatFinish, tmnxEsaColdRebooted, tmnxEqCardFirmwareUpgradeStarted, tmnxEqCardFirmwareUpgradeFailed, tmnxChassisFanModuleMismatch, tmnxChassisFanModuleMismatchClr, tmnxChassisAntiTheftMismatch, tmnxChassisAntiTheftMismatchClr, tmnxChassisFanModuleOperUp

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** **log log-events chassis event** *keyword generate boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context	configure log log-events chassis event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events chassis event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events chassis event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events chassis event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events chassis event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events chassis event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug **event** *keyword*

Synopsis	Enter the debug list instance
Context	configure log log-events debug event <i>keyword</i>
Tree	debug
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events debug event <i>keyword</i>
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events debug event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events debug event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events debug event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp [event](#) *keyword*

Synopsis	Enter the dhcp list instance
Context	configure log log-events dhcp event <i>keyword</i>
Tree	dhcp
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [dhcp](#) [event](#) *keyword*

Tree [dhcp](#)

Options svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [dhcp](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [dhcp](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure log log-events dhcp event** *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure log log-events dhcp event** *keyword specific-throttle boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure log log-events dhcp event** *keyword specific-throttle-interval number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure log log-events dhcp event** *keyword specific-throttle-limit number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dhcp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcps [event](#) *keyword*

Synopsis	Enter the dhcps list instance
Context	configure log log-events dhcps event <i>keyword</i>
Tree	dhcps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dhcps event <i>keyword</i>
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired,

	tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped, tmnxDhcpSvrSkipCustomOptionMapTE
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dhcp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dhcp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dhcp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	configure log log-events dhcps event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dhcps event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dhcps event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dhcps event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diameter event keyword

Synopsis	Enter the diameter list instance
Context	configure log log-events diameter event keyword
Tree	diameter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events diameter event keyword
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events diameter event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events diameter event keyword repeat boolean
Tree	repeat
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword specific-throttle boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword specific-throttle-interval number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword specific-throttle-limit number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword* **throttle** *boolean*
Tree [throttle](#)
Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

dot1x [event](#) *keyword*

Synopsis Enter the **dot1x** list instance
Context **configure** [log](#) [log-events](#) [dot1x](#) [event](#) *keyword*
Tree [dot1x](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Events for dynsvc module
Context **configure** [log](#) [log-events](#) [dot1x](#) [event](#) *keyword*
Tree [dot1x](#)
Options alxDot1xHostAuthEvent
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log](#) [log-events](#) [dot1x](#) [event](#) *keyword* **generate** *boolean*

Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dot1x event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dot1x event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval

Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dot1x event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynsvc [event](#) *keyword*

Synopsis	Enter the dynsvc list instance
Context	configure log log-events dynsvc event <i>keyword</i>
Tree	dynsvc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log log-events dynsvc event keyword
Tree	dynsvc
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events dynsvc event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dynsvc event keyword repeat boolean
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events dynsvc event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dynsvc event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

efm-oam *event* *keyword*

Synopsis Enter the **efm-oam** list instance

Context **configure** **log** **log-events** **efm-oam** *event* *keyword*

Tree **efm-oam**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** **log** **log-events** **efm-oam** *event* *keyword*

Tree **efm-oam**

Options tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected,
tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent,
tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr,
tmnxDot3OamNonThresholdEventClr

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** **log** **log-events** **efm-oam** *event* *keyword* **generate** *boolean*

Tree **generate**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** **log** **log-events** **efm-oam** *event* *keyword* **repeat** *boolean*

Tree **repeat**

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events efm-oam event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events efm-oam event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events efm-oam event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events efm-oam event <i>keyword</i> specific-throttle-limit <i>number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events efm-oam event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ering [event](#) *keyword*

Synopsis	Enter the ering list instance
Context	configure log log-events ering event <i>keyword</i>
Tree	ering
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ering event <i>keyword</i>
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsNRaiseAlarm, tmnxEthRingApsPrvsNClearAlarm
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ering event <i>keyword generate boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ering event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ering event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ering event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ering event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ering event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ering event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm [event](#) *keyword*

Synopsis	Enter the eth-cfm list instance
Context	configure log log-events eth-cfm event <i>keyword</i>
Tree	eth-cfm
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword*

Tree [eth-cfm](#)

Options dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcItyFaultRaise, tmnxDot1agCfmMepFcItyFaultClear, tmnxDot1agCfmMepOperGrpStateChgd

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context	configure log log-events eth-cfm event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events eth-cfm event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events eth-cfm event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events eth-cfm event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events eth-cfm event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

etun [event](#) *keyword*

Synopsis	Enter the etun list instance
Context	configure log log-events etun event <i>keyword</i>
Tree	etun
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events etun event <i>keyword</i>
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm , tmnxEthTunnelApsCfgClearAlarm , tmnxEthTunnelApsPrvsNRaiseAlarm , tmnxEthTunnelApsPrvsNClearAlarm , tmnxEthTunnelApsNoRspRaiseAlarm , tmnxEthTunnelApsNoRspClearAlarm , tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events etun event <i>keyword</i> generate <i>boolean</i>
Tree	generate

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events etun event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events etun event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events etun event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events etun event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.

Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events etun event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events etun event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter [event](#) *keyword*

Synopsis	Enter the filter list instance
Context	configure log log-events filter event <i>keyword</i>
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events filter event <i>keyword</i>

Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events filter event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events filter event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events filter event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events filter event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events filter event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events filter event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events filter event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gsmp event *keyword*

Synopsis Enter the **gsmp** list instance

Context **configure log log-events gsmp event** *keyword*

Tree **gsmp**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log log-events gsmp event** *keyword*

Tree **gsmp**

Options tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL,
tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL,
tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected,
tmnxAncpStringRejected

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure log log-events gsmp event** *keyword generate* *boolean*

Tree **generate**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure log log-events gsmp event** *keyword repeat* *boolean*

Tree **repeat**

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events gsmp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events gsmp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events gsmp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events gsmp event <i>keyword specific-throttle-limit number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events gsmpp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp [event](#) *keyword*

Synopsis	Enter the igmp list instance
Context	configure log log-events igmp event <i>keyword</i>
Tree	igmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igmp event <i>keyword</i>
Tree	igmp
Options	vRtrIgmpIfRxQueryVerMismatch, vRtrIgmpIfCModeRxQueryMismatch, vRtrIgmpMaxGrpsLimitExceeded, vRtrIgmpMcacPlcyDropped, vRtrIgmpHostInstantiationFail, vRtrIgmpHostMaxGrpsLimitExceeded, vRtrIgmpHostMcacPlcyDropped, vRtrIgmpHostCModeRxQueryMismatch, vRtrIgmpHostRxQueryVerMismatch, vRtrIgmpHostMaxSrcsLimitExceeded, vRtrIgmpMaxSrcsLimitExceeded, vRtrIgmpGrpIfSapMaxGrpsLimExceed, vRtrIgmpGrpIfSapMaxSrcsLimExceed, vRtrIgmpGrpIfSapMcacPlcyDropped, vRtrIgmpGrpIfSapCModeRxQueryMism, vRtrIgmpGrpIfSapRxQueryVerMism, vRtrIgmpHostMaxGrpSrcsLimitExcd, vRtrIgmpMaxGrpSrcsLimitExceeded, vRtrIgmpGrpIfSapMaxGrpSrcLimExcd, vRtrIgmpHostQryIntervalConflict,

	vRtrIcmpNotifyNumOfIPsecIfLowWm, vRtrIcmpNotifyNumOfIPsecIfHighWm, vRtrIcmpNotifyNumOfIPsecIfMaxRch, vRtrIcmpSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events igmp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events igmp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events igmp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	configure log log-events igmp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events igmp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events igmp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events igmp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping *event keyword*

Synopsis	Enter the igmp-snooping list instance
Context	configure log log-events igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Options	saplgmpSnpgGrpLimitExceeded, saplgmpSnpgMcacPlcyDropped, sdpBndlgmpSnpgGrpLimitExceeded, sdpBndlgmpSnpgMcacPlcyDropped, saplgmpSnpgMcsFailure, saplgmpSnpgSrcLimitExceeded, sdpBndlgmpSnpgSrcLimitExceeded, sdpBndlgmpSnpgGrpSrcLimitExceed, saplgmpSnpgGrpSrcLimitExceeded, eMplslgmpSnpgMfibFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events igmp-snooping event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events igmp-snooping event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events igmp-snooping event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events igmp-snooping event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events igmp-snooping event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events igmp-snooping event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events igmp-snooping event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip [event](#) *keyword*

Synopsis	Enter the ip list instance
Context	configure log log-events ip event <i>keyword</i>
Tree	ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ip event <i>keyword</i>
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ip event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ip event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ip event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ip event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ip event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ip event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ip event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec *event keyword*

Synopsis	Enter the ipsec list instance
Context	configure log log-events ipsec event <i>keyword</i>
Tree	ipsec
Introduced	25.3.R2

Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1
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event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ipsec event <i>keyword</i>
Tree	ipsec
Options	tlPsecRUTnlFailToCreate, tlPsecRUSAFailToAddRoute, tlPsecBfdIntfSessStateChgd, tlPsecRadAcctPlcyFailure, tlPsecTrustAnchorPrfOprChg, tlPsecTunnelEncapIpMtuTooSmall, tlPsecRuTnlEncapIpMtuTooSmall, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tlPsecRUTnlRemoved, tlPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ipsec event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ipsec event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

severity *keyword*

Synopsis	Severity level associated with event type
<p>1. The system is unable to process requests for a certain period of time.</p> <p>2. The system is unable to process requests for a certain period of time.</p> <p>3. The system is unable to process requests for a certain period of time.</p>	<p>1. High</p> <p>2. Medium</p> <p>3. Low</p>

Context	configure log log-events ipsec event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ipsec event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ipsec event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ipsec event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events ipsec event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

isis event keyword

Synopsis	Enter the isis list instance
Context	configure log log-events isis event <i>keyword</i>
Tree	isis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events isis event <i>keyword</i>
Tree	isis
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAdrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPToolLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCirclIdExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc, tmnxIsisFaOperParticipationDown, tmnxIsisRejectedEndXSid, tmnxIsisRejectedPgId, tmnxIsisSrv6LocError, tmnxIsisSrv6StaticSidIfTypeError, tmnxIsisMultiPartTlvTruncated, tmnxIsisMultiPartTlvReceived

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events isis event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events isis event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events isis event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events isis event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events isis event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events isis event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events isis event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag [event](#) *keyword*

Synopsis	Enter the lag list instance
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Context	configure log log-events lag event keyword
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events lag event keyword
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events lag event keyword generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events lag event keyword repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events lag event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events lag event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events lag event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events lag event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events lag event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldap [event](#) *keyword*

Synopsis	Enter the ldap list instance
Context	configure log log-events ldap event <i>keyword</i>
Tree	ldap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ldap event <i>keyword</i>
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ldap event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ldap event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ldap event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ldap event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ldap event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ldap event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ldap event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp event *keyword*

Synopsis	Enter the ldp list instance
Context	configure log log-events ldap event <i>keyword</i>
Tree	ldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ldap event <i>keyword</i>
Tree	ldp
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged,

	vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ldp event keyword generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ldp event keyword repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ldp event keyword severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	configure log log-events ldp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ldp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ldp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ldp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lldp event *keyword*

Synopsis	Enter the lldp list instance
Context	configure log log-events lldp event <i>keyword</i>
Tree	lldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events lldp event <i>keyword</i>
Tree	lldp
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events lldp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events lldp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword specific-throttle boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword specific-throttle-interval number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [lldp event](#) *keyword specific-throttle-limit number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events lldp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

logger [event](#) *keyword*

Synopsis	Enter the logger list instance
Context	configure log log-events logger event <i>keyword</i>
Tree	logger
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events logger event <i>keyword</i>
Tree	logger
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun, tmnxCustomEvent1, tmnxCustomEvent2, tmnxCustomEvent3, tmnxCustomEvent4, tmnxCustomEvent5, tmnxCustomEvent6, tmnxNetconfNotifyOverrun
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events logger event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events logger event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events logger event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events logger event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events logger event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events logger event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events logger event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

macsec [event](#) *keyword*

Synopsis	Enter the macsec list instance
Context	configure log log-events macsec event <i>keyword</i>
Tree	macsec
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword*

Tree [macsec](#)

Options tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete, tmnxMacsecPrimKeychainNoActKey, tmnxMacsecPrimKeychainHasActKey, tmnxMacsecRecovKeychainNoActKey, tmnxMacsecRecovKeychainHasActKey, tmnxMacsecConnAssocCreated, tmnxMacsecConnAssocDeleted

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [macsec](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events macsec event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events macsec event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events macsec event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events macsec event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events macsec event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-redundancy *event keyword*

Synopsis	Enter the mc-redundancy list instance
Context	configure log log-events mc-redundancy event <i>keyword</i>
Tree	mc-redundancy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mc-redundancy event <i>keyword</i>
Tree	mc-redundancy
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceldMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedlIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear,

	tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mc-redundancy event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mc-redundancy event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mc-redundancy event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	configure log log-events mc-redundancy event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mc-redundancy event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mc-redundancy event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mc-redundancy event <i>keyword throttle boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcpath event keyword

Synopsis	Enter the mcpath list instance
Context	configure log log-events mcpath event keyword
Tree	mcpath
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mcpath event keyword
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events mcpath event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mcpath event keyword repeat boolean
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mcpath event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mcpath event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mgmt-core [event](#) *keyword*

Synopsis	Enter the mgmt-core list instance
Context	configure log log-events mgmt-core event <i>keyword</i>
Tree	mgmt-core
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mgmt-core event <i>keyword</i>
Tree	mgmt-core
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange, mdAutomaticRollbackFailed, mdRollbackFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mgmt-core event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [mgmt-core](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [mgmt-core](#) [event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure** [log](#) [log-events](#) [mgmt-core](#) [event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [mgmt-core](#) [event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mgmt-core event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mgmt-core event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mirror [event](#) *keyword*

Synopsis	Enter the mirror list instance
Context	configure log log-events mirror event <i>keyword</i>
Tree	mirror
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mirror event <i>keyword</i>
Tree	mirror

Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpV6FilterChange, tMirrorSapUnavailSath, tMirrorSapUnavailSathClr, tMirrorFtrUnavailSath, tMirrorFtrUnavailSathClr, tMirrorPortUnavailSath, tMirrorPortUnavailSathClr
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mirror event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mirror event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mirror event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events mirror event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mirror event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mirror event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mirror event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mld event keyword

Synopsis Enter the **mld** list instance

Context **configure log log-events mld event** keyword

Tree **mld**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log log-events mld event** keyword

Tree **mld**

Options vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrplfSapMaxGrpsLimExceed, vRtrMldGrplfSapMaxSrcsLimExceed, vRtrMldGrplfSapMcacPlcyDropped, vRtrMldGrplfSapCModeRxQueryMism, vRtrMldGrplfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrplfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlcyDrop

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate boolean

Synopsis Generate log events when the event occurs

Context **configure log log-events mld event** keyword **generate** boolean

Tree **generate**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mld event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mld event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events mld event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mld event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mld event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mld event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld-snooping [event](#) *keyword*

Synopsis	Enter the mld-snooping list instance
Context	configure log log-events mld-snooping event <i>keyword</i>
Tree	mld-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mld-snooping event <i>keyword</i>
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events mld-snooping event](#) *keyword generate boolean*
Tree [generate](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events mld-snooping event](#) *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events mld-snooping event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event
Context **configure** [log log-events mld-snooping event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log log-events mld-snooping event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log log-events mld-snooping event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log log-events mld-snooping event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mpls [event](#) *keyword*

Synopsis Enter the **mpls** list instance

Context **configure** [log log-events mpls event](#) *keyword*

Tree	mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mpls event <i>keyword</i>
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResigned, vRtrMplsP2mplInstanceUp, vRtrMplsP2mplInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResigned, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mplInstanceResigned, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInlpgOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted, vRtrMplsNodeInlpgOverloadIpv6, tmnxMplsResourceHighUsage, tmnxMplsResourceExhausted, tmnxMplsResourceRecovered, vRtrMplsLspContOptStarted, vRtrMplsLspContMaxLspsExceeded, vRtrMplsLspContMinLspsExceeded
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events mpls event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mpls event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mpls event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events mpls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mpls event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mpls event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mpls event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-tp event *keyword*

Synopsis	Enter the mpls-tp list instance
Context	configure log log-events mpls-tp event <i>keyword</i>
Tree	mpls-tp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mpls-tp event <i>keyword</i>
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events mpls-tp event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events mpls-tp event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events mpls-tp event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event
Context **configure** [log log-events mpls-tp event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log log-events mpls-tp event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log log-events mpls-tp event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log log-events mpls-tp event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nat event *keyword*

Synopsis Enter the **nat** list instance

Context **configure** [log log-events nat event](#) *keyword*

Tree	nat
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events nat event keyword
Tree	nat
Options	tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsghigh, tmnxNatLsnSubUdpPortUsghigh, tmnxNatLsnSubTcpPortUsghigh, tmnxNatLsnSubSessionUsghigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh, tmnxNatPILsnMemberPortUsageHigh, tmnxNatDetAddrMapOperStateChngd, tmnxNatVrtrOutRoutesHigh, tmnxNatMapERuleChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events nat event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events nat event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events nat event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events nat event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events nat event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events nat event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events nat event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ntp *event* *keyword*

Synopsis	Enter the ntp list instance
Context	configure log log-events ntp event <i>keyword</i>
Tree	ntp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ntp event <i>keyword</i>
Tree	ntp
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events ntp event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events ntp event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events ntp event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event
Context **configure** [log log-events ntp event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [ntp event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [ntp event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events](#) [ntp event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

oam [event](#) *keyword*

Synopsis Enter the **oam** list instance

Context **configure** [log](#) [log-events](#) [oam event](#) *keyword*

Tree	oam
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events oam event <i>keyword</i>
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcldInvalid, svcldWrongType, tmnxOamLdpTraceAutoDiscState, tmnxOamLdpTraceFecProbeState, tmnxOamLdpTraceFecDisStatus, tmnxOamLdpTraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events oam event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events oam event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events oam event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events oam event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events oam event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events oam event <i>keyword</i> specific-throttle-limit <i>number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events oam event keyword throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf [event](#) *keyword*

Synopsis	Enter the ospf list instance
Context	configure log log-events ospf event keyword
Tree	ospf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ospf event keyword
Tree	ospf
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning,

tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events ospf event](#) keyword [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events ospf event](#) keyword [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events ospf event](#) keyword [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ospf event keyword specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ospf event keyword specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ospf event keyword specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ospf event keyword throttle <i>boolean</i>
Tree	throttle

Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcap event *keyword*

Synopsis	Enter the pcap list instance
Context	configure log log-events pcap event <i>keyword</i>
Tree	pcap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pcap event <i>keyword</i>
Tree	pcap
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pcap event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pcap event <i>keyword repeat</i> <i>boolean</i>

Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pcap event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events pcap event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pcap event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
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Context	configure log log-events pcap event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pcap event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcep event *keyword*

Synopsis	Enter the pcep list instance
Context	configure log log-events pcep event <i>keyword</i>
Tree	pcep
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	PCEP module events
Context	configure log log-events pcep event <i>keyword</i>
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pcep event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pcep event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pcep event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events pcep event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pcep event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pcep event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pcep event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pfcp [event](#) *keyword*

Synopsis	Enter the pfcp list instance
Context	configure log log-events pfcp event <i>keyword</i>
Tree	pfcp
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis PFCP events

Context **configure** [log log-events pfc event keyword](#)

Tree [pfc](#)

Options none, tmnxPfcInvalidle, tmnxPfcNoSuchCalltraceProfile, tmnxPfcNoSecondaryInterface

Notes This element is part of a list key.

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events pfc event keyword generate boolean](#)

Tree [generate](#)

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events pfc event keyword repeat boolean](#)

Tree [repeat](#)

Default false

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events pfc event keyword severity keyword](#)

Tree [severity](#)

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events pfcg event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pfcg event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pfcg event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pfcg event <i>keyword</i> throttle <i>boolean</i>

Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

pim event *keyword*

Synopsis	Enter the pim list instance
Context	configure log log-events pim event <i>keyword</i>
Tree	pim
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pim event <i>keyword</i>
Tree	pim
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlcyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrld, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pim event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events pim event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events pim event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure** [log log-events pim event](#) *keyword specific-throttle boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log log-events pim event](#) *keyword specific-throttle-interval number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log log-events pim event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log log-events pim event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

pim-snooping [event](#) *keyword*

Synopsis Enter the **pim-snooping** list instance
Context **configure** [log log-events pim-snooping event](#) *keyword*
Tree [pim-snooping](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log log-events pim-snooping event](#) *keyword*
Tree [pim-snooping](#)

Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pim-snooping event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pim-snooping event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pim-snooping event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pim-snooping event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port event keyword

Synopsis	Enter the port list instance
Context	configure log log-events port event <i>keyword</i>
Tree	port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events port event <i>keyword</i>
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimChange, tmnxPortEtherLoopbackStarted, tmnxPortEtherLoopbackStopped, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear, SFPStatusInvalidFormFactor, SFPStatusModuleFault, tmnxDS0ChanGrpLoopbackStarted, tmnxDS0ChanGrpLoopbackStopped, tmnxResvPoolUseThreshExcd, tmnxResvPoolUseThreshNotExcd,

tmnxTotalPoolUseThreshExcd, tmnxTotalPoolUseThreshNotExcd,
 tmnxSharedPoolUseThreshExcd, tmnxSharedPoolUseThreshNotExcd,
 tmnxEqPortFlexEGroupAlrm, tmnxEqPortFlexEGroupAlrmClr,
 tmnxEqPortFlexEMemberAlrm, tmnxEqPortFlexEMemberAlrmClr,
 tmnxEqPortFlexEMbrPhyInstAlrm, tmnxEqPortFlexEMbrPhyInstAlrmClr,
 tmnxEqPortDataChanAlrm, tmnxEqPortDataChanAlrmClear,
 tmnxEqPortDataLoopbackStarted, tmnxEqPortDataLoopbackStopped,
 tmnxEqPortRs232LoopbackStarted, tmnxEqPortRs232LoopbackStopped,
 tmnxEqPortRS232Alrm, tmnxEqPortRS232AlrmClear

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events port event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events port event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events port event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log](#) [log-events](#) [port event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [port event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [port event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events](#) [port event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ptp event *keyword*

Synopsis	Enter the ptp list instance
Context	configure log log-events ptp event keyword
Tree	ptp
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ptp event keyword
Tree	ptp
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpTimeRecoveryStateChange, tmnxPtpPeerNoTxTimestamping, tmnxPtpPeerNoTxTimestampingClear, tmnxPtpPeerNoRxTimestamping, tmnxPtpPeerNoRxTimestampingClear
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ptp event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ptp event keyword repeat boolean
Tree	repeat

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ptp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ptp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ptp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ptp event <i>keyword</i> specific-throttle-limit <i>number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ptp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

python [event](#) *keyword*

Synopsis	Enter the python list instance
Context	configure log log-events python event <i>keyword</i>
Tree	python
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Python module events
Context	configure log log-events python event <i>keyword</i>
Tree	python
Options	tmnxPythonInterpreterRestarted, tmnxPythonPreComScrStarted, tmnxPythonPreComScrFinished, tmnxPythonPostComScrStarted, tmnxPythonPostComScrFinished, tmnxPythonPreComScrSkipped, tmnxPythonPostComScrSkipped
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events python event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events python event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events python event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events python event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events python event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events python event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events python event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius [event](#) *keyword*

Synopsis	Enter the radius list instance
Context	configure log log-events radius event <i>keyword</i>
Tree	radius
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword*

Tree [radius](#)

Options tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events radius event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events radius event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events radius event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events radius event <i>keyword</i> throttle <i>boolean</i>

Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rip [event](#) *keyword*

Synopsis	Enter the rip list instance
Context	configure log log-events rip event <i>keyword</i>
Tree	rip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rip event <i>keyword</i>
Tree	rip
Options	ripPacketDiscarded , vRtrRipAuthTypeMismatch , vRtrRipAuthTypeFailure , vRtrRipInstanceShuttingDown , vRtrRipInstanceRestarted , vRtrRipInstanceExpLmtReached , vRtrRipInstanceExpLmtWarning , vRtrRipInstanceRtsExpLmtDropped , vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rip event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rip event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rip event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events rip event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rip event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rip event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rip event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ripng event *keyword*

Synopsis	Enter the ripng list instance
Context	configure log log-events ripng event <i>keyword</i>
Tree	ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ripng event <i>keyword</i>
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ripng event <i>keyword generate boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ripng event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ripng event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events ripng event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ripng event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ripng event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ripng event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-policy [event](#) *keyword*

Synopsis	Enter the route-policy list instance
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Context	configure log log-events route-policy event <i>keyword</i>
Tree	route-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events route-policy event <i>keyword</i>
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events route-policy event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events route-policy event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
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Context	configure log log-events route-policy event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events route-policy event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events route-policy event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events route-policy event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events route-policy event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpki [event](#) *keyword*

Synopsis	Enter the rpki list instance
Context	configure log log-events rpki event <i>keyword</i>
Tree	rpki
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rpki event <i>keyword</i>
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rpki event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rpki event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rpki event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events rpki event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rpki event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rpki event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rpki event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp event *keyword*

Synopsis	Enter the rsvp list instance
Context	configure log log-events rsvp event <i>keyword</i>
Tree	rsvp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rsvp event <i>keyword</i>
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events rsvp event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events rsvp event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events rsvp event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event
Context **configure** [log log-events rsvp event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log log-events rsvp event keyword specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log log-events rsvp event keyword specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log log-events rsvp event keyword throttle](#) *boolean*

Tree [throttle](#)

Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

security [event keyword](#)

Synopsis Enter the **security** list instance

Context **configure** [log log-events security event keyword](#)

Tree	security
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events security event keyword
Tree	security
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSrvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrlopt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning,

tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess, tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime, tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded, tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid, tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid, tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io, md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen, tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed, tmnxSecSignedSwCpmBootEvent, tSecSgndSwUefiVarsUpdtReqd, tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin, tmnxSysLicenseCleared, tmnxSysLicensingStateOk, tmnxPkiCertChainCompareCaNoMatch, ssh_auth_key_gen, ssh_auth_key_synch_fail, tmnxSSHListeningPortChanged, tmnxTelnetListeningPortChanged, tmnxSSHListeningPortOccupied, tmnxTelnetListeningPortOccupied, tmnxSSHListeningPortInUse, tmnxTelnetListeningPortInUse, tmnxSysSwDSValidationResult, tacplusUserProfileInvalid, tmnxSSHInvalidPacketLength, tmnxSecureBootDisabledAlarm, tmnxSecSignedSwSatBootEvent, tacplusSingleConnNotSupported, fileCreatedByUser, fileDeletedByUser, fileModifiedByUser, fileCopiedByUser, fileMovedByUser, SSH_client_preserve_key_fail

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** **log** **log-events** **security event** *keyword generate* *boolean*

Tree *generate*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events security event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events security event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events security event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events security event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events security event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events security event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp event *keyword*

Synopsis	Enter the snmp list instance
Context	configure log log-events snmp event <i>keyword</i>
Tree	snmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events snmp event <i>keyword</i>
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, hcRisingAlarm, hcFallingAlarm, snmpdError
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events snmp event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events snmp event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events snmp event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event
Context **configure** [log log-events snmp event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events snmp event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events snmp event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events snmp event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Description This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sr-mpls [event](#) *keyword*

Synopsis Enter the **sr-mpls** list instance

Context **configure** [log](#) [log-events sr-mpls event](#) *keyword*

Tree	sr-mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	SR MPLS event
Context	configure log log-events sr-mpls event keyword
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure, tmnxSrMplsPfxSidFlexAlgoFailure
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events sr-mpls event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events sr-mpls event keyword repeat boolean
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events sr-mpls event keyword severity keyword

Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events sr-mpls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events sr-mpls event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events sr-mpls event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
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Context	configure log log-events sr-mpls event <i>keyword throttle boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy event *keyword*

Synopsis	Enter the sr-policy list instance
Context	configure log log-events sr-policy event <i>keyword</i>
Tree	sr-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Events for SR policy module
Context	configure log log-events sr-policy event <i>keyword</i>
Tree	sr-policy
Options	vRtrSrPathIsCandPathOperChanged, vRtrSrPlcyPathActiveStateChanged
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events sr-policy event <i>keyword generate boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events sr-policy event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events sr-policy event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events sr-policy event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events sr-policy event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events sr-policy event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events sr-policy event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp [event](#) *keyword*

Synopsis	Enter the stp list instance
Context	configure log log-events stp event <i>keyword</i>
Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events stp event <i>keyword</i>
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN,

	tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events stp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events stp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events stp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events stp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events stp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events stp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events stp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

svcmgr event keyword

Synopsis Enter the **svcmgr** list instance

Context **configure log log-events svcmgr event keyword**

Tree **svcmgr**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

event keyword

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log log-events svcmgr event keyword**

Tree **svcmgr**

Options svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTblFullAlarmRaised, svcTlsMrpAttrTblFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd, svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd, svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd, svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd, svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, svcEvpnMHPortActEsDFStateChgd, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared,

sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded,
sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed,
sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged,
dynamicSdpBindConfigChanged, dynamicSdpCreationFailed,
dynamicSdpBindCreationFailed, sdpEgrlfsNetDomInconsCntChanged,
sdpBindPipeCelpAddressChange, sdpBindReceivedProtSrcMac,
sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock,
sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped,
sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected,
svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,
svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,
svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,
svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,
svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,
sdpBindReceivedPbbProtSrcMac, svcSrv6TEPHiUsageRaised,
svcSrv6TEPHiUsageCleared, svcTlsMfibTableFullAlarmRaised,
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPlcyFailure,
tmnxSubMcsRelatedProblem, tmnxSubAuthPlcyRadSerOperStatChg,
tmnxSubAcctPlcyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,
tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,
tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,
tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,
svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,
svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,
svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,
sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,
svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,
tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,
svcTlsGroupOperStatusChanged, sapTunnelStateChange,
tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig,
svcOperGrpOperStatusChanged, sapPipeCelpAddrChange,
svcMSPwRetryExpiredNotif, svcVllSiteDesigFwdrChg, tmnxSubSlaacSetupFailure,
tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,
tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,
tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,
tmnxSublpoelInvalidSessionKey, tmnxSublpoelInvalidCidRidChange,
tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,
tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,
tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,
tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,

tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError, tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached, tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected, aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError, tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed, tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd, svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed, tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd, tmnxSubInfoEgrAggRateLimitLowReq, tmnxSublpoeWppRegistrationFailed, svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr, svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict, svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr, svcIfSubForwardingStatsDisNotify, svcIfSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange, svcEvpnMplsMldpESLbIHUsgSet, svcEvpnMplsMldpESLbIHUsgClr, svcTlsProxyArpUnauthorizedIP, svcTlsProxyNdUnauthorizedIP, svcRvplsEvpnMcastDestSysHiUsgSet, svcRvplsEvpnMcastDestSysHiUsgClr, tmnxSubPysrosExec, tmnxSubPysrosExecFail, svcEvpnVxInstMHStandbyStatusChg, sapCemAsymDelayControlEventStart, sapCemAsymDelayControlEventStop, sapCemActMultPathStateChg

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** **log** **log-events** **svcmgr** **event** keyword **generate** *boolean*

Tree **generate**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** **log** **log-events** **svcmgr** **event** keyword **repeat** *boolean*

Tree **repeat**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events svcmgr event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events svcmgr event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events svcmgr event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events svcmgr event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events svcmgr event <i>keyword</i> throttle boolean
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system event keyword

Synopsis	Enter the system list instance
Context	configure log log-events system event <i>keyword</i>
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events system event <i>keyword</i>
Tree	system
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable,

tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, tmnxLastSystemRebootAdmin, mdCommitInProgress, mdCommitSucceeded, tmnxSysNtcnfListenPortOccupied, tmnxSysNtcnfListenOperStateChngd, tmnxSysNtcnfSessionDropped

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events system event](#) keyword [generate](#) *boolean*

Tree [generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events system event](#) keyword [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events system event](#) keyword [severity](#) *keyword*

Tree [severity](#)

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events system event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events system event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events system event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events system event <i>keyword</i> throttle <i>boolean</i>

Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls [event](#) *keyword*

Synopsis	Enter the tls list instance
Context	configure log log-events tls event <i>keyword</i>
Tree	tls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events tls event <i>keyword</i>
Tree	tls
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure, tmnxTlsSANCheckStatus
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events tls event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
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Context	configure log log-events tls event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events tls event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events tls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events tls event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events tls event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events tls event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user [event](#) *keyword*

Synopsis	Enter the user list instance
Context	configure log log-events user event <i>keyword</i>
Tree	user
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events user event <i>keyword</i>
Tree	user
Options	cli_user_login , cli_user_logout , cli_user_login_failed , cli_user_login_max_attempts , ftp_user_login , ftp_user_logout , ftp_user_login_failed , ftp_user_login_max_attempts , cli_user_io , snmp_user_set , cli_config_io , cli_unauth_user_io , cli_unauth_config_io , grpc_user_login , grpc_user_logout , grpc_user_login_failed ,

	grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events user event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events user event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events user event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	configure log log-events user event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events user event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events user event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events user event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp event keyword

Synopsis	Enter the vrrp list instance
Context	configure log log-events vrrp event keyword
Tree	vrrp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events vrrp event keyword
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events vrrp event keyword generate boolean
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events vrrp event keyword repeat boolean

Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events vrrp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events vrrp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events vrrp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
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Context	configure log log-events vrrp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events vrrp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrtr [event](#) *keyword*

Synopsis	Enter the vrtr list instance
Context	configure log log-events vrtr event <i>keyword</i>
Tree	vrtr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events vrtr event <i>keyword</i>
Tree	vrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrtExportLimitReached,

tmnxVRtrGrtroutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrtrV6ExportLimitReached, tmnxVRtrGrtrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCIRtStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CIRtStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, tmnxVRtrBfdMultiHopFpMismatch, vRtrBgplInstanceError, vrtrIfTunnelOperStateChange, tmnxVRtrBfdExtModifTxIntrvl, tmnxVRtrBfdSessParamConflict, tmnxVRtrBfdSessIntvlNoHwOffload

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** **log log-events** **vrtr event** *keyword* **generate** *boolean*

Tree **generate**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** **log log-events** **vrtr event** *keyword* **repeat** *boolean*

Tree **repeat**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle *boolean*

Synopsis Use parameters to throttle the specific event

Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Description This command specifies the number of seconds that the specific throttling intervals lasts.

Range 1 to 1200

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [vrtr event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events vrtr event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wlan-gw [event](#) *keyword*

Synopsis	Enter the wlan-gw list instance
Context	configure log log-events wlan-gw event <i>keyword</i>
Tree	wlan-gw
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events wlan-gw event <i>keyword</i>
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh, tmnxWlanGwGtpUpPeerRtUnreach

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events wlan-gw event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events wlan-gw event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events wlan-gw event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events wlan-gw event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wpp [event](#) *keyword*

Synopsis	Enter the wpp list instance
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Context	configure log log-events wpp event <i>keyword</i>
Tree	wpp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events wpp event <i>keyword</i>
Tree	wpp
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events wpp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events wpp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events wpp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle *boolean*

Synopsis	Use parameters to throttle the specific event
Context	configure log log-events wpp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events wpp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Description	This command specifies the number of seconds that the specific throttling intervals lasts.
Range	1 to 1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events wpp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events wpp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Description	This command specifies whether events of this type are throttled. By default, event throttling is on for most event types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-id [[name](#)] *log-name*

Synopsis	Enter the log-id list instance
Context	configure log log-id <i>log-name</i>
Tree	log-id
Max. instances	31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *log-name*

Synopsis	Log ID
Context	configure log log-id <i>log-name</i>
Tree	log-id
String length	1 to 64
String format	'log-name' must be numeric 1..102 or alphanumeric not starting with underscore and without leading or trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the log
Context	configure log log-id <i>log-name</i> admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log log-id log-name description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination

Synopsis	Enter the destination context
Context	configure log log-id log-name destination
Tree	destination
Description	Commands in this context specify where log event data is to be sent.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli

Synopsis	Enable the cli context
Context	configure log log-id log-name destination cli
Tree	cli
Description	<p>Commands in this context configure log events directed to any subscribed CLI session.</p> <p>Subscribe to a CLI log from within a CLI session using the tools perform log subscribe-to log-id command. Events are sent to the CLI session for the duration of the CLI session or until a tools perform log unsubscribe-from command is issued. A local circular memory log is maintained for CLI logs.</p>
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*



WARNING:

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

Synopsis	Number of events stored in this CLI log
Context	configure log <i>log-id</i> <i>log-name</i> destination cli max-entries <i>number</i>
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console



WARNING:

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

Synopsis	Send log events to the system console port
Context	configure log <i>log-id</i> <i>log-name</i> destination console
Tree	console
Description	When specified, the system directs log events to the console port. If the console is not connected, the system drops all entries.
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

file reference

**WARNING:**

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

Synopsis	File to send log events
Context	configure log log-id log-name destination file reference
Tree	file
Description	<p>This command specifies the file where the system directs log events.</p> <p>When the command is modified, log files are not written to the new location until a rollover occurs or the log is manually cleared. Use the clear log command to force a rollover. Subsequent log entries are then written to the new location. If a rollover does not occur or the log is not cleared, the system continues to use the old location.</p>
Reference	configure log file file-policy-name
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

memory

Synopsis	Enable the memory context
Context	configure log log-id log-name destination memory
Tree	memory
Description	<p>Commands in this context configure log events directed to a memory file. A memory file is a circular buffer. When the file is full, each new entry replaces the oldest entry in the log.</p>
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

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

Synopsis	Number of events stored in this memory log
Context	configure log log-id log-name destination memory max-entries <i>number</i>
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf

Synopsis	Enable the netconf context
Context	configure log log-id log-name destination netconf
Tree	netconf
Description	Commands in this context configure log events directed to a NETCONF session as notifications. A NETCONF client can subscribe to a NETCONF log using the configured netconf-stream for the log in a subscription request. One or more NETCONF sessions can subscribe to a NETCONF log or stream.
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

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

Synopsis	Number of events stored in this NETCONF log
Context	configure log log-id log-name destination netconf max-entries <i>number</i>
Tree	max-entries

Range	50 to 3000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp

Synopsis	Enable the snmp context
Context	configure log log-id log-name destination snmp
Tree	snmp
Description	Commands in this context configure log events directed to the snmp-trap-group associated with the log ID. A local circular memory log is maintained for SNMP logs.
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*



WARNING:

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

Synopsis	Number of events stored in this SNMP log
Context	configure log log-id log-name destination snmp max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

syslog *reference*



WARNING:

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

Synopsis	Syslog collector to send log events
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Context	configure log log-id log-name destination syslog <i>reference</i>
Tree	syslog
Description	This command specifies the syslog collector to direct log events. To remain consistent with the standards governing syslog, messages to syslog are truncated to 1024 bytes.
Reference	configure log syslog <i>log-syslog-name</i>
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , openconfig-messages , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Event filter policy with the log destination
Context	configure log log-id log-name filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf-stream *named-item*

Synopsis	Destination NETCONF stream name
Context	configure log log-id log-name netconf-stream <i>named-item</i>
Tree	netconf-stream
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source

Synopsis	Enter the source context
Context	configure log log-id log-name source
Tree	source
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

change *boolean*

Synopsis Collect log events from change event stream
Context **configure** [log log-id log-name](#) [source change](#) *boolean*
Tree [change](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

debug *boolean*

Synopsis Collect log events from the debug event stream
Context **configure** [log log-id log-name](#) [source debug](#) *boolean*
Tree [debug](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

main *boolean*

Synopsis Collect log events from the main event stream
Context **configure** [log log-id log-name](#) [source main](#) *boolean*
Tree [main](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

security *boolean*

Synopsis Collect log events from the security event stream
Context **configure** [log log-id log-name](#) [source security](#) *boolean*
Tree [security](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

time-format *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	configure log log-id log-name time-format <i>keyword</i>
Tree	time-format
Options	utc, local
Default	utc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-preference

Synopsis	Enter the route-preference context
Context	configure log route-preference
Tree	route-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary *keyword*

Synopsis	Primary routing preference for traffic that is generated for SNMP notifications and syslog messages
Context	configure log route-preference primary <i>keyword</i>
Tree	primary
Options	inband, outband
Default	outband
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary *keyword*

Synopsis	Secondary route preference for SNMP and syslog traffic
Context	configure log route-preference secondary <i>keyword</i>
Tree	secondary
Options	inband, outband, none

Default	inband
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

services-all-events

Synopsis	Enter the services-all-events context
Context	configure log services-all-events
Tree	services-all-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service [[service-name](#)] *reference*

Synopsis	Add a list entry for service
Context	configure log services-all-events service reference
Tree	service
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] *reference*

Synopsis	Administrative service name
Context	configure log services-all-events service reference
Tree	service
Reference	configure service vprn service-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp-trap-group [[log-name](#)] *snmp-trap-group-name*

Synopsis	Enter the snmp-trap-group list instance
Context	configure log snmp-trap-group snmp-trap-group-name
Tree	snmp-trap-group

Max. instances	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[log-name] *snmp-trap-group-name*

Synopsis	Log ID
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i>
Tree	snmp-trap-group
String length	1 to 32
String format	'snmp-trap-group-name' must be numeric 1..100 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trap-target [[name](#)] *string*

Synopsis	Enter the trap-target list instance
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i>
Tree	trap-target
Max. instances	25
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *string*

Synopsis	Trap target name
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i>
Tree	trap-target
String length	1 to 28
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the trap receiver
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

notify-community *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
----------	--

Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> notify-community <i>string</i>
Tree	notify-community
String length	1 to 31
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	162
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replay *boolean*

Synopsis	Retransmit missed notifications
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> replay <i>boolean</i>
Tree	replay
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security-level *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> security-level <i>keyword</i>
Tree	security-level
Options	no-auth-no-privacy, auth-no-privacy, privacy

Default	no-auth-no-privacy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	configure log snmp-trap-group <i>snmp-trap-group-name</i> trap-target <i>string</i> version <i>keyword</i>
Tree	version
Options	snmpv1, snmpv2c, snmpv3
Default	snmpv3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

syslog [[syslog-name](#)] *log-syslog-name*

Synopsis	Enter the syslog list instance
Context	configure log syslog <i>log-syslog-name</i>
Tree	syslog
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[syslog-name] *log-syslog-name*

Synopsis	Syslog name
Context	configure log syslog <i>log-syslog-name</i>
Tree	syslog
String length	1 to 64
String format	'log-syslog-name' must be numeric 1..10 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

address (*ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name*)

Synopsis IP address or FQDN of the Syslog target host

Context **configure log syslog** *log-syslog-name* **address** (*ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name*)

Tree **address**

String length 1 to 255

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure log syslog** *log-syslog-name* **description** *description*

Tree **description**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

facility *keyword*

Synopsis Facility code for messages

Context **configure log syslog** *log-syslog-name* **facility** *keyword*

Tree **facility**

Options kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7

Default local7

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hostname

Synopsis Enter the **hostname** context

Context	configure log syslog log-syslog-name hostname
Tree	hostname
Description	Commands in this context control how the HOSTNAME field of syslog messages is populated.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-system-name

Synopsis	Enable the use-system-name context
Context	configure log syslog log-syslog-name hostname use-system-name
Tree	use-system-name
Description	<p>This command configures the system to use the system name configured with the configure system name command as the HOSTNAME field of syslog messages.</p> <p>Do not use any spaces in the system name if it is being used for the syslog HOSTNAME.</p>
Notes	The following elements are part of a choice: use-system-name or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *named-item-255*

Synopsis	Syslog HOSTNAME field value
Context	configure log syslog log-syslog-name hostname value <i>named-item-255</i>
Tree	value
Description	<p>This command configures the system to use a specified string as the HOSTNAME field of syslog messages.</p> <p>Do not use any spaces in the string used for the syslog HOSTNAME.</p>
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: use-system-name or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-prefix (*keyword* | *string*)

Synopsis	String that is prepended to every log message sent to this target syslog host
Context	configure log syslog <i>log-syslog-name</i> log-prefix (<i>keyword</i> <i>string</i>)
Tree	log-prefix
String length	1 to 32
String format	'log-prefix' must contain only printable characters between 33 and 126 ASCII except '.' and '='
Options	no-prefix
Default	TMNX
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	Destination port when sending syslog over UDP
Context	configure log syslog <i>log-syslog-name</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	514
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-version *keyword*

Synopsis	Version of the syslog protocol to use
Context	configure log syslog <i>log-syslog-name</i> protocol-version <i>keyword</i>
Tree	protocol-version
Description	<p>This command configures the version of the syslog protocol to use for sending syslog messages to a collector.</p> <p>The timestamp-format command is ignored when this command is configured to rfc5424.</p>
Options	rfc3164 – Use the RFC 3164 version of syslog rfc5424 – Use the RFC 5424 version of syslog
Default	rfc3164
Introduced	26.10.R1

Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis	Severity level threshold for the syslog message
Context	configure log syslog <i>log-syslog-name</i> severity <i>keyword</i>
Tree	severity
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timestamp-format *keyword*

Synopsis	Syslog timestamp format
Context	configure log syslog <i>log-syslog-name</i> timestamp-format <i>keyword</i>
Tree	timestamp-format
Options	millisecond – Set timestamp format to milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

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

Synopsis	TLS client profile used to encrypt syslog communication
Context	configure log syslog <i>log-syslog-name</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	<p>This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.</p> <p>Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.</p> <p>When this command is unconfigured, the syslog messages are sent over UDP.</p>
Reference	configure system security tls client-tls-profile <i>named-item</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

throttle-rate

Synopsis	Enter the throttle-rate context
Context	configure log throttle-rate
Tree	throttle-rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Duration of an event throttling interval
Context	configure log throttle-rate interval <i>number</i>
Tree	interval
Range	1 to 1200
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Number of log events within the throttle interval
Context	configure log throttle-rate limit <i>number</i>
Tree	limit
Range	1 to 20000
Default	2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.15 macsec commands

```

configure
- macsec
  - apply-groups reference
  - apply-groups-exclude reference
  - connectivity-association string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - auto-gen-psk
    - apply-groups reference
    - apply-groups-exclude reference
    - cak-name-prefix string
    - generate-interval number
    - recovery-keychain reference
  - cipher-suite keyword
  - clear-tag-mode keyword
  - delay-protection boolean
  - description string
  - encryption-offset number
  - macsec-encrypt boolean
  - mka-hello-interval keyword
  - mka-key-server-priority number
  - psk-type keyword
  - replay-protection boolean
  - replay-window-size number
  - static-cak
    - active-psk number
    - apply-groups reference
    - apply-groups-exclude reference
    - keychain
      - primary reference
    - pre-shared-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - cak encrypted-leaf-hex-without-prefix
      - cak-name cak-name
      - encryption-type keyword
  - mac-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-mac-address mac-address

```

4.15.1 macsec command descriptions

macsec

Synopsis	Enter the macsec context
Context	configure macsec
Tree	macsec
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connectivity-association [[ca-name](#)] *string*

Synopsis	Enter the connectivity-association list instance
Context	configure macsec connectivity-association <i>string</i>
Tree	connectivity-association
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-name] *string*

Synopsis	Connectivity association name
Context	configure macsec connectivity-association <i>string</i>
Tree	connectivity-association
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the connectivity association
Context	configure macsec connectivity-association <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-gen-psk

Synopsis	Enter the auto-gen-psk context
Context	configure macsec connectivity-association <i>string</i> auto-gen-psk
Tree	auto-gen-psk
Description	Commands in this context configure PSK autogeneration.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

cak-name-prefix *string*

Synopsis	Prefix string to include in the CKN
Context	configure macsec connectivity-association <i>string</i> auto-gen-psk cak-name-prefix <i>string</i>
Tree	cak-name-prefix
Description	<p>This command configures the prefix string to use in the CKN. The system generates each CKN by combining the following:</p> <ul style="list-style-type: none"> • 20 bytes of the cak-name-prefix. If the entire 20 bytes is not configured, the system pads the remaining bytes with zeroes. • 2 bytes of zeroes that are reserved for future use • 6 bytes of the local chassis mac (to ensure that the CKNs on different chassis are unique) • 4 bytes of a counter that increments by one every time a new CKN is generated
String length	2 to 40
String format	'cak-name-prefix' must be even-length hex up to 40 characters (e.g. 0a1b2c)
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

generate-interval *number*

Synopsis	Interval to autogenerate and distribute a new PSK
Context	configure macsec connectivity-association <i>string</i> auto-gen-psk generate-interval <i>number</i>

Tree	generate-interval
Range	10 to 86400
Units	minutes
Default	1440
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

recovery-keychain *reference*

Synopsis	Keychain to initialize and recover PSK autogeneration
Context	configure macsec connectivity-association <i>string</i> auto-gen-psk recovery-keychain reference
Tree	recovery-keychain
Description	This command configures the MACsec keychain used to establish the initial MKA. The initial MKA is used to distribute the first auto-generated PSK and establish the autogenerating MKA session. The system also uses the keychain as a backup if the autogenerated MKA fails for any reason.
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

cipher-suite *keyword*

Synopsis	Data path encryption algorithm
Context	configure macsec connectivity-association <i>string</i> cipher-suite <i>keyword</i>
Tree	cipher-suite
Options	gcm-aes-128 , gcm-aes-256 , gcm-aes-xpn-128 , gcm-aes-xpn-256
Default	gcm-aes-128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-tag-mode *keyword*

**WARNING:**

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

Synopsis	Clear tag mode for clear text before the SecTAG
Context	configure macsec connectivity-association <i>string</i> clear-tag-mode <i>keyword</i>
Tree	clear-tag-mode
Options	none, single-tag, dual-tag
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-protection *boolean*



WARNING:

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

Synopsis	Enable delay protection
Context	configure macsec connectivity-association <i>string</i> delay-protection <i>boolean</i>
Tree	delay-protection
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *string*

Synopsis	Text description
Context	configure macsec connectivity-association <i>string</i> description <i>string</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-offset *number*

Synopsis	Confidentiality (encryption) offset
Context	configure macsec connectivity-association <i>string</i> encryption-offset <i>number</i>
Tree	encryption-offset
Range	0 30 50

Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

macsec-encrypt *boolean*

Synopsis	Encrypt and authenticate all PDUs
Context	configure macsec connectivity-association <i>string</i> macsec-encrypt <i>boolean</i>
Tree	macsec-encrypt
Description	When configured to true , all PDUs are encrypted and authenticated. When configured to false , all PDUs are transmitted in clear text, however, they are still authenticated and have the trailing ICV.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mka-hello-interval *keyword*

Synopsis	Interval used for MKA hello by the MKA protocol.
Context	configure macsec connectivity-association <i>string</i> mka-hello-interval <i>keyword</i>
Tree	mka-hello-interval
Options	1, 2, 3, 4, 5, 6, 500ms
Default	2
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

mka-key-server-priority *number*

Synopsis	Key server priority used by the MKA protocol
Context	configure macsec connectivity-association <i>string</i> mka-key-server-priority <i>number</i>
Tree	mka-key-server-priority
Description	This command specifies the key server priority used by the MACsec Key Agreement (MKA) protocol to select the key server when MACsec is enabled using static connectivity association key (CAK) security mode.
Range	0 to 255

Default	16
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

psk-type *keyword*



WARNING:

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

Synopsis	Type of PSK to use
Context	configure macsec connectivity-association <i>string</i> psk-type <i>keyword</i>
Tree	psk-type
Options	static – Use static PSK auto-gen – Use autogenerated PSK
Default	static
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

replay-protection *boolean*



WARNING:

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

Synopsis	Discard packet when not within the replay window size
Context	configure macsec connectivity-association <i>string</i> replay-protection <i>boolean</i>
Tree	replay-protection
Description	<p>When configured to true, replay protection is enabled and packets are discarded when they are not within the replay window size.</p> <p>With replay protection, the sequence of the ID number of received packets is checked. If a packet arrives out of sequence and the difference between the packet IDs exceeds the replay protection window size, the packet is counted by the receiving port and discarded. For example if the replay protection window size is configured to five and a packet with an ID of 1006 arrives on the receiving link immediately following the packet assigned an ID of 1000, the packet with ID 1006 is counted and discarded because it is outside the parameter of the window size.</p> <p>Replay protection is particularly useful for addressing man-in-the-middle attacks. A packet that is replayed by a man-in-the-middle attacker on the Ethernet link that arrives</p>

on the receiving link out of sequence will be detected and dropped instead of forwarded through the network.

Replay protection should not be enabled in cases where packets are expected to arrive out of order.

When configured to **false**, replay protection is not enabled.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replay-window-size *number*



WARNING:

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

Synopsis	Replay protection window size
Context	configure macsec connectivity-association <i>string</i> replay-window-size <i>number</i>
Tree	replay-window-size
Range	0 to 4294967294
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-cak

Synopsis	Enter the static-cak context
Context	configure macsec connectivity-association <i>string</i> static-cak
Tree	static-cak
Description	Commands in this context configure the Connectivity Association Key (CAK) to manage the MACsec Key Agreement (MKA).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

active-psk *number*

Synopsis	Active pre-shared-key (PSK)
Context	configure macsec connectivity-association <i>string</i> static-cak active-psk <i>number</i>

Tree	active-psk
Description	This command specifies the active transmitting PSK. If two PSKs are configured, the arriving MACsec MKA can be decrypted via CAKs using either PSK; however, only the active PSK is used for TX encryption of MKA PDUs.
Range	1 to 2
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keychain

Synopsis	Enter the keychain context
Context	configure macsec connectivity-association <i>string</i> static-cak keychain
Tree	keychain
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

primary *reference*

Synopsis	Keychain name for primary use
Context	configure macsec connectivity-association <i>string</i> static-cak keychain <i>primary reference</i>
Tree	primary
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

pre-shared-key [[psk-id](#)] *number*

Synopsis	Enter the pre-shared-key list instance
Context	configure macsec connectivity-association <i>string</i> static-cak pre-shared-key <i>number</i>
Tree	pre-shared-key
Description	<p>Commands in this context configure pre-shared key attributes to enable MACsec using static connectivity association key (CAK) security mode.</p> <p>A pre-shared key includes a connectivity association key name (CKN) and a connectivity association key (CAK). The pre-shared key, the CKN and the CAK, must match on both ends of a link.</p>

A pre-shared key is configured on both devices at each end of a point-to-point link to enable MACsec via static CAK security mode. The MACsec Key Agreement (MKA) protocol is enabled after the successful MKA liveness negotiation.

The encryption type is used to encrypt the SAK and authenticate the MKA packet. The symmetric encryption key SAK (Security Association Key) must be encrypted (wrapped) via the MKA protocols. The AES key is derived from the pre-shared-key.

Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[psk-id] *number*

Synopsis	Pre-shared-key (PSK) ID
Context	configure macsec connectivity-association <i>string</i> static-cak pre-shared-key <i>number</i>
Tree	pre-shared-key
Range	1 to 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cak *encrypted-leaf-hex-without-prefix*

Synopsis	Connectivity association key (CAK) for the PSK
Context	configure macsec connectivity-association <i>string</i> static-cak pre-shared-key <i>number</i> cak <i>encrypted-leaf-hex-without-prefix</i>
Tree	cak
Description	<p>This command specifies the connectivity association key (CAK) for the pre-shared key. Two values are derived from the CAK:</p> <ul style="list-style-type: none"> • Key Encryption Key (KEK), used to encrypt the MKA and SAK (symmetric key used for data path PDUs) distributed between all members • Integrity Check Value (ICV), used to authenticate the MKA and SAK PDUs distributed between all members <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 126
String format	'encrypted-leaf-hex-without-prefix' must have clear text in hex without 0x or end with hash/hash2/hash3/custom

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

cak-name *cak-name*

Synopsis Connectivity association key name (CKN) for the PSK
 Context **configure** **macsec connectivity-association** *string static-cak pre-shared-key number cak-name cak-name*
 Tree **cak-name**
 Description This command specifies the connectivity association key name (CKN) for the pre-shared key. The CKN is appended to the MKA for identification of the appropriate CAK by the peer.
 String length 1 to 64
 String format 'cak-name' must be even-length hex up to 64 characters (e.g. 0a1b2c)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

encryption-type *keyword*

Synopsis Encryption for authentication of the MKA packet
 Context **configure** **macsec connectivity-association** *string static-cak pre-shared-key number encryption-type keyword*
 Tree **encryption-type**
 Options aes-128-cmac, aes-256-cmac
 Notes This element is mandatory.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

mac-policy [*mac-policy-id*] *number*

Synopsis Enter the **mac-policy** list instance
 Context **configure** **macsec mac-policy** *number*
 Tree **mac-policy**
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[mac-policy-id] *number*

Synopsis	MAC address policy ID
Context	configure macsec mac-policy <i>number</i>
Tree	mac-policy
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-mac-address [[dest-mac-addr](#)] *mac-address*

Synopsis	Add a list entry for destination-mac-address
Context	configure macsec mac-policy <i>number</i> destination-mac-address <i>mac-address</i>
Tree	destination-mac-address
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[dest-mac-addr](#)] *mac-address*

Synopsis	Destination MAC address added to the MAC policy
Context	configure macsec mac-policy <i>number</i> destination-mac-address <i>mac-address</i>
Tree	destination-mac-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.16 mirror commands

```

configure
- mirror
  - apply-groups reference
  - apply-groups-exclude reference
  - mirror-dest service-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - encap
    - endpoint named-item
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - revert-time (number | keyword)
  - fc keyword
  - pcap named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - pcap-file-location
      - password encrypted-leaf
      - url ts-remote-url-ftp-sftp-512
      - username encrypted-leaf
    - router-instance named-item-64
    - ssh-private-key
      - passphrase encrypted-leaf
      - url cflash-without-slot-url
  - remote-source
    - far-end ipv4-address
      - apply-groups reference
      - apply-groups-exclude reference
      - ing-vc-label number
      - label-signaling keyword
      - vc-id number
    - spoke-sdp sdp-bind-id
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - control-word boolean
      - egress
        - vc-label number
      - endpoint
        - name reference
      - ingress
        - vc-label number
  - sap sap
    - apply-groups reference
    - apply-groups-exclude reference
    - egress
      - ip-mirror
        - mac
          - destination mac-address
          - source mac-unicast-address
      - qos
        - sap-egress
          - policy-name reference
          - port-redirect-group
            - group-name reference
            - instance number

```

configure mirror mirror-dest sap endpoint

- **endpoint** *reference*
- **service-id** *number*
- **slice-size** *number*
- **spoke-sdp** *sdp-bind-id*
 - **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **egress**
 - **vc-label** *number*
- **endpoint**
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **type** *keyword*
- **mirror-source** *service-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-filter** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **ipv6-filter** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
- **port** *mirror-source-port-lag-key*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress** *boolean*
 - **ingress** *boolean*
- **sap** *sap*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress** *boolean*
 - **ingress** *boolean*

4.16.1 mirror command descriptions

mirror

Synopsis	Enter the mirror context
Context	configure mirror
Tree	mirror
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mirror-dest [[service-name](#)] *service-name*

Synopsis	Enter the mirror-dest list instance
Context	configure mirror mirror-dest <i>service-name</i>
Tree	mirror-dest
Description	<p>Commands in this context set up a packet mirroring service to allow mirrored packets to be directed locally (within the same router) or remotely (over the core of the network and with a far-end decode mirror encapsulation).</p> <p>The mirror destination service is composed of destination options that define where the mirrored packets are sent. It also specifies whether the defined service will receive mirrored packets from a far-end router over the network core.</p> <p>The mirror destination services are persistent between boots of the router and are included in the configuration saves.</p>
Max. instances	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[service-name](#)] *service-name*

Synopsis	Administrative service name
Context	configure mirror mirror-dest <i>service-name</i>
Tree	mirror-dest
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the service
Context **configure** **mirror** **mirror-dest** *service-name* **admin-state** *keyword*
Tree **admin-state**
Options enable, disable
Default disable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** **mirror** **mirror-dest** *service-name* **description** *description*
Tree **description**
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

encap

Synopsis Enter the **encap** context
Context **configure** **mirror** **mirror-dest** *service-name* **encap**
Tree **encap**
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

endpoint [*name*] *named-item*

Synopsis Enter the **endpoint** list instance
Context **configure** **mirror** **mirror-dest** *service-name* **endpoint** *named-item*

Tree	endpoint
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Service endpoint name
Context	configure mirror mirror-dest <i>service-name</i> endpoint <i>named-item</i>
Tree	endpoint
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure mirror mirror-dest <i>service-name</i> endpoint <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to primary spoke SDP
Context	configure mirror mirror-dest <i>service-name</i> endpoint <i>named-item</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Units	seconds

Options	never, immediate
Default	immediate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class for destination traffic
Context	configure mirror mirror-dest <i>service-name</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcap [**session-name**] *named-item*

Synopsis	Enter the pcap list instance
Context	configure mirror mirror-dest <i>service-name</i> pcap <i>named-item</i>
Tree	pcap
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[session-name] *named-item*

Synopsis	PCAP session name
Context	configure mirror mirror-dest <i>service-name</i> pcap <i>named-item</i>
Tree	pcap

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcap-file-location

Synopsis	Enter the pcap-file-location context
Context	configure mirror mirror-dest <i>service-name</i> pcap <i>named-item</i> pcap-file-location
Tree	pcap-file-location
Description	Commands in this context configure the remote location and authentication credentials used to write the packet capture file.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

password *encrypted-leaf*

Synopsis	Password used to access the remote URL
Context	configure mirror mirror-dest <i>service-name</i> pcap <i>named-item</i> pcap-file-location password <i>encrypted-leaf</i>
Tree	password
String length	1 to 126
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

url *ts-remote-url-ftp-sftp-512*

Synopsis	Remote destination file without username or password
Context	configure mirror mirror-dest <i>service-name</i> pcap <i>named-item</i> pcap-file-location url <i>ts-remote-url-ftp-sftp-512</i>
Tree	url
Description	This command specifies a file URL for the FTP or SFTP server, including the filename, for packet capture transfer. After the file URL is entered, the system attempts to establish a connection and creates a file using the specified filename. The command prompt displays an error and rejects the file URL if the session establishment fails, write privilege to the remote server fails, or the session experiences a sudden termination. If the FTP or SFTP server is unreachable, the command prompt halts for further input until

the retry attempts time out after 24 seconds (after 4 attempts of about 6 seconds each).
This command overwrites any file with the same filename on the FTP or SFTP server.

String length 1 to 512
Introduced 26.10.R1
Platforms 7705 SAR Gen 2

username *encrypted-leaf*

Synopsis Username used to access the remote URL
Context **configure** **mirror** **mirror-dest** *service-name* **pcap** *named-item* **pcap-file-location**
username *encrypted-leaf*
Tree **username**
String length 1 to 126
Introduced 26.10.R1
Platforms 7705 SAR Gen 2

router-instance *named-item-64*

Synopsis Router name used for FTP transmission of the PCAP file
Context **configure** **mirror** **mirror-dest** *service-name* **pcap** *named-item* **router-instance** *named-item-64*
Tree **router-instance**
String length 1 to 64
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ssh-private-key

Synopsis Enter the **ssh-private-key** context
Context **configure** **mirror** **mirror-dest** *service-name* **pcap** *named-item* **ssh-private-key**
Tree **ssh-private-key**
Description Commands in this context configure an SSH client private key file for user authentication instead of a password. The client private key file is encrypted and must be decrypted with a passphrase before it can be used.
Introduced 26.10.R1

Platforms 7705 SAR Gen 2

passphrase *encrypted-leaf*

Synopsis Passphrase protecting the SSH client private key file

Context **configure** **mirror** **mirror-dest** *service-name* **pcap** *named-item* **ssh-private-key** **passphrase** *encrypted-leaf*

Tree **passphrase**

String length 1 to 166

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

url *cflash-without-slot-url*

Synopsis Location of the file with the SSH client private key

Context **configure** **mirror** **mirror-dest** *service-name* **pcap** *named-item* **ssh-private-key** **url** **cflash-without-slot-url**

Tree **url**

String length 1 to 200

String format 'cflash-without-slot-url' must be cf1-4: followed by path (e.g. cf1:/path)

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

remote-source

Synopsis Enable the **remote-source** context

Context **configure** **mirror** **mirror-dest** *service-name* **remote-source**

Tree **remote-source**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

far-end [**far-end-addr**] *ipv4-address*

Synopsis Enter the **far-end** list instance

Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **far-end** *ipv4-address*

Tree **far-end**

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[far-end-addr] *ipv4-address*

Synopsis Far end IP address
Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **far-end** *ipv4-address*
Tree **far-end**
String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ing-vc-label *number*

Synopsis Ingress virtual circuit label
Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **far-end** *ipv4-address* **ing-vc-label** *number*
Tree **ing-vc-label**
Range 1 to 1048575
Notes The following elements are part of a choice: **ing-vc-label** or **label-signaling**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

label-signaling *keyword*

Synopsis Protocol to obtain the ingress labels
Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **far-end** *ipv4-address* **label-signaling** *keyword*
Tree **label-signaling**
Options tldp
Default tldp
Notes The following elements are part of a choice: **ing-vc-label** or **label-signaling**.
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vc-id *number*

Synopsis Virtual circuit ID associated with the remote source

Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **far-end** *ipv4-address* **vc-id** *number*

Tree **vc-id**

Range 1 to 4294967295

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

spoke-sdp [**sdp-bind-id**] *sdp-bind-id*

Synopsis Enter the **spoke-sdp** list instance

Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **spoke-sdp** *sdp-bind-id*

Tree **spoke-sdp**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis SDP ID number

Context **configure** **mirror** **mirror-dest** *service-name* **remote-source** **spoke-sdp** *sdp-bind-id*

Tree **spoke-sdp**

String length 3 to 16

String format 'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the service SDP binding

Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> control-word <i>boolean</i>
Tree	control-word
Description	<p>When configured to true, this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type ether.</p> <p>When configured to false, this command disables the PW control word.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:

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

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint

Synopsis	Enter the endpoint context
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> endpoint
Tree	endpoint
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name reference

Synopsis	SAP-associated endpoint name
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> endpoint <i>name</i> <i>reference</i>
Tree	name
Reference	configure mirror mirror-dest <i>service-name</i> endpoint <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*

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

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>service-name</i> remote-source spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [**sap-id**] *sap*

Synopsis	Enter the sap list instance
Context	configure mirror mirror-dest <i>service-name</i> sap <i>sap</i>
Tree	sap
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *sap*

Synopsis	SAP ID
Context	configure mirror mirror-dest <i>service-name</i> sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-mirror

Synopsis	Enter the ip-mirror context
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress ip-mirror
Tree	ip-mirror
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Enter the mac context
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress ip-mirror mac
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination *mac-address*

Synopsis	Destination MAC address
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress ip-mirror mac destination <i>mac-address</i>
Tree	destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source *mac-unicast-address*

Synopsis	Source MAC address
----------	--------------------

Context	configure mirror mirror-dest <i>service-name</i> sap sap egress ip-mirror mac source <i>mac-unicast-address</i>
Tree	source
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-egress

Synopsis	Enter the sap-egress context
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress qos sap-egress
Tree	sap-egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
----------	--

Context	configure mirror mirror-dest <i>service-name</i> sap sap egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress qos sap-egress port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Port queue group instance
Context	configure mirror mirror-dest <i>service-name</i> sap sap egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint *reference*

Synopsis	Service endpoint name
Context	configure mirror mirror-dest <i>service-name</i> sap sap endpoint <i>reference</i>
Tree	endpoint
Reference	configure mirror mirror-dest <i>service-name</i> endpoint <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id *number*

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

Synopsis	Service ID
Context	configure mirror mirror-dest <i>service-name</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

slice-size *number*

Synopsis	Maximum size of the transmitted mirrored frame
Context	configure mirror mirror-dest <i>service-name</i> slice-size <i>number</i>
Tree	slice-size
Range	0 128 to 9216
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [**sdp-bind-id**] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure mirror mirror-dest <i>service-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**sdp-bind-id**] *sdp-bind-id*

Synopsis	SDP ID number
Context	configure mirror mirror-dest <i>service-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp

String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	configure mirror mirror-dest <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:

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

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

endpoint

Synopsis Enter the **endpoint** context

Context **configure** **mirror** **mirror-dest** *service-name* **spoke-sdp** *sdp-bind-id* **endpoint**

Tree **endpoint**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

name reference

Synopsis Endpoint name associated with the SAP

Context **configure** **mirror** **mirror-dest** *service-name* **spoke-sdp** *sdp-bind-id* **endpoint name reference**

Tree **name**

Reference **configure** **mirror** **mirror-dest** *service-name* **endpoint** *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

precedence (*number* | *keyword*)

Synopsis Precedence when multiple SDP binds are on one endpoint

Context **configure** **mirror** **mirror-dest** *service-name* **spoke-sdp** *sdp-bind-id* **endpoint precedence** (*number* | *keyword*)

Tree **precedence**

Range 1 to 4

Options primary

Default 4

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

type keyword



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

Synopsis	Mirror type information
Context	configure mirror mirror-dest service-name type keyword
Tree	type
Options	ether, ip-only
Default	ether
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mirror-source [service-name] service-name

Synopsis	Enter the mirror-source list instance
Context	configure mirror mirror-source service-name
Tree	mirror-source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] service-name

Synopsis	Administrative service name
Context	configure mirror mirror-source service-name
Tree	mirror-source
Description	<p>This command creates or edits a service instance.</p> <p>When a service is created, the customer keyword and <i>customer-id</i> must be specified and associates the service with a customer. The <i>customer-id</i> must already exist having been created using the customer command in the service context. When a service is created with a customer association, it is not possible to edit the customer association. The service must be deleted and re-created with a new customer association.</p> <p>When a service is created, the use of the customer<i>customer-id</i> is optional to navigate into the service configuration context. If attempting to edit a service with the incorrect <i>customer-id</i> results in an error.</p> <p>This command specifies the unique service identification number identifying the service in the service domain. This ID must be unique to this service and may not be used for</p>

any other service of any type. The service ID must be the same number used for every platform on which this service is defined.

String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the mirror service
Context	configure mirror mirror-source <i>service-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-filter [**filter-name**] *reference*

Synopsis	Enter the ip-filter list instance
Context	configure mirror mirror-source <i>service-name</i> ip-filter <i>reference</i>
Tree	ip-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *reference*

Synopsis	IP filter name
Context	configure mirror mirror-source <i>service-name</i> ip-filter <i>reference</i>
Tree	ip-filter
Reference	configure filter ip-filter <i>filter-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Add a list entry for entry
Context	configure mirror mirror-source <i>service-name</i> ip-filter <i>reference</i> entry <i>number</i>
Tree	entry
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	IP filter entry ID
Context	configure mirror mirror-source <i>service-name</i> ip-filter <i>reference</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-filter [[filter-name](#)] *reference*

Synopsis	Enter the ipv6-filter list instance
Context	configure mirror mirror-source <i>service-name</i> ipv6-filter <i>reference</i>
Tree	ipv6-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[filter-name] *reference*

Synopsis	IPv6 filter name
Context	configure mirror mirror-source <i>service-name</i> ipv6-filter <i>reference</i>
Tree	ipv6-filter
Reference	configure filter ipv6-filter <i>filter-name</i>
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Add a list entry for entry
Context	configure mirror mirror-source <i>service-name</i> ipv6-filter <i>reference</i> entry <i>number</i>
Tree	entry
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	IPv6 filter entry ID
Context	configure mirror mirror-source <i>service-name</i> ipv6-filter <i>reference</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [[port-id](#)] *mirror-source-port-lag-key*

Synopsis	Enter the port list instance
Context	configure mirror mirror-source <i>service-name</i> port <i>mirror-source-port-lag-key</i>
Tree	port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[port-id] *mirror-source-port-lag-key*

Synopsis	Port ID
Context	configure mirror mirror-source <i>service-name</i> port <i>mirror-source-port-lag-key</i>

Tree	port
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>service-name</i> port <i>mirror-source-port-lag-key</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress *boolean*

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>service-name</i> port <i>mirror-source-port-lag-key</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	configure mirror mirror-source <i>service-name</i> sap <i>sap</i>
Tree	sap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] sap

Synopsis	SAP ID
Context	configure mirror mirror-source <i>service-name</i> sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress boolean

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>service-name</i> sap <i>sap</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress boolean

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>service-name</i> sap <i>sap</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.17 oam-pm commands

```

configure
- oam-pm
- apply-groups reference
- apply-groups-exclude reference
- bin-group number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bin-type keyword
- apply-groups reference
- apply-groups-exclude reference
- bin number
- apply-groups reference
- apply-groups-exclude reference
- lower-bound number
- delay-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- exclude-lowest-bin number
- lowest-bin number
- raise-threshold number
- exclude-from-avg keyword
- apply-groups reference
- apply-groups-exclude reference
- bins string
- description description
- session named-item
- apply-groups reference
- apply-groups-exclude reference
- bin-group reference
- description description
- ethernet
- dest-mac mac-unicast-address
- dmm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- interval number
- test-duration number
- test-id (number | keyword)
- priority number
- remote-mep number
- slm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- flr-threshold number
- hli-force-count boolean
- interval number
- loss-events
- avg-flr-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword

```

configure oam-pm session ethernet slm loss-events chli-event apply-groups

- **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **hli-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **unavailability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **undet-availability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **undet-unavailability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **test-duration** *number*
- **test-id** (*number* | *keyword*)
- **timing**
 - **chli-threshold** *number*
 - **consec-delta-t** *number*
 - **frames-per-delta-t** *number*
- **source**
 - **ma-admin-name** (*named-item-64* | *admin-name*)
 - **md-admin-name** (*named-item-64* | *admin-name*)
 - **mep** *number*
- **ip**
 - **allow-egress-remark-dscp** *boolean*
 - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **destination-udp-port** *number*
 - **do-not-fragment** *boolean*
 - **dscp** (*keyword* | *keyword*)
 - **fc** *keyword*
 - **forwarding**
 - **bypass-routing**
 - **interface** *interface-name*
 - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **pattern** (*keyword* | *number*)
 - **profile** *keyword*
 - **router-instance** *string*
 - **source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **source-udp-port** *number*
 - **ttl** *number*
 - **tunnel**
 - **mpls**
 - **rsvp-te**
 - **lsp** *named-item-64*
 - **rsvp-te-auto**
 - **from** *ipv4-unicast-address*
 - **lsp-template** *named-item*
 - **to** *ipv4-unicast-address*
 - **sr-isis**
 - **flex-algo** *number*
 - **igp-instance** *number*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **sr-ospf**

configure oam-pm session ip tunnel mpls sr-ospf flex-algo

```

    - flex-algo number
    - igp-instance number
    - prefix ipv4-unicast-prefix
  - sr-policy
    - color number
    - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
    - segment-list number
  - sr-te
    - lsp named-item-64
- twamp-light
  - admin-state keyword
  - allow-ipv6-udp-checksum-zero boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - interval number
  - loss
    - flr-threshold number
    - hli-force-count boolean
    - timing
      - chli-threshold number
      - consec-delta-t number
      - frames-per-delta-t number
  - loss-events
    - avg-flr-event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-threshold decimal-number
      - raise-threshold decimal-number
    - chli-event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-threshold number
      - raise-threshold number
    - hli-event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-threshold number
      - raise-threshold number
    - unavailability-event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-threshold number
      - raise-threshold number
    - undet-availability-event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-threshold number
      - raise-threshold number
    - undet-unavailability-event keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - clear-threshold number
      - raise-threshold number
  - pad-size number
  - pad-tlv-size number
  - record-stats keyword
  - session-sender-type keyword
  - test-duration number
  - test-id (number | keyword)
  - timestamp-format keyword
- measurement-interval keyword
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference

```

configure oam-pm session measurement-interval boundary-type

- **boundary-type** *keyword*
- **clock-offset** *number*
- **intervals-stored** *number*
- **threshold-cross-alerts**
 - **admin-state** *keyword*
 - **delay-events** *boolean*
 - **loss-events** *boolean*
- **session-type** *keyword*

4.17.1 oam-pm command descriptions

oam-pm

Synopsis	Enter the oam-pm context
Context	configure oam-pm
Tree	oam-pm
Description	Commands in this context configure proactive and on-demand tests used to gather the performance and statistical information and define storage parameters (including binning structures).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bin-group [**bin-group-id**] *number*

Synopsis	Enter the bin-group list instance
Context	configure oam-pm bin-group <i>number</i>
Tree	bin-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**bin-group-id**] *number*

Synopsis	Bin group ID
Context	configure oam-pm bin-group <i>number</i>
Tree	bin-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the bin group
Context	configure oam-pm bin-group <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bin-type [[bin-metric](#)] *keyword*

Synopsis	Enter the bin-type list instance
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i>
Tree	bin-type
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bin-metric] *keyword*

Synopsis	Delay metric bin structure
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i>
Tree	bin-type
Options	fd – Frame Delay fdr – Frame Delay Range ifdv – Inter-Frame Delay Variation
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bin [[bin-number](#)] *number*

Synopsis	Enter the bin list instance
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> bin <i>number</i>
Tree	bin
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bin-number] *number*

Synopsis	Bin number
----------	------------

Context	configure <i>oam-pm bin-group number bin-type keyword bin number</i>
Tree	<i>bin</i>
Range	0 to 9
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lower-bound *number*

Synopsis	Lower bound for the bin
Context	configure <i>oam-pm bin-group number bin-type keyword bin number lower-bound number</i>
Tree	<i>lower-bound</i>
Range	0 1 to 4294967295
Units	microseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-event [*direction*] *keyword*

Synopsis	Enter the delay-event list instance
Context	configure <i>oam-pm bin-group number bin-type keyword delay-event keyword</i>
Tree	<i>delay-event</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure <i>oam-pm bin-group number bin-type keyword delay-event keyword</i>
Tree	<i>delay-event</i>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	OAM-PM clear threshold for an excessive delay
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-lowest-bin *number*

Synopsis	Lowest bin excluded from the TCA count
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> exclude-lowest-bin <i>number</i>
Tree	exclude-lowest-bin
Range	1 to 9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lowest-bin *number*

Synopsis	Lowest delay bin used when applying a delay threshold
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> lowest-bin <i>number</i>
Tree	lowest-bin
Range	0 to 9
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Raise threshold for excessive delay
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> raise-threshold <i>number</i>

Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-from-avg [[direction](#)] *keyword*

Synopsis	Enter the exclude-from-avg list instance
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> exclude-from-avg <i>keyword</i>
Tree	exclude-from-avg
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> exclude-from-avg <i>keyword</i>
Tree	exclude-from-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bins *string*

Synopsis	Bin numbers excluded from the average calculation
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> exclude-from-avg <i>keyword</i> bins <i>string</i>
Tree	bins
String length	1 to 39
String format	'bins' must be all, comma-separated bin numbers, or ranges (0-9)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure oam-pm bin-group <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session [**session-name**] *named-item*

Synopsis	Enter the session list instance
Context	configure oam-pm session <i>named-item</i>
Tree	session
Description	Commands in this context create the individual session containers that house the test specific configuration parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[session-name] *named-item*

Synopsis	OAM-PM session name
Context	configure oam-pm session <i>named-item</i>
Tree	session
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bin-group *reference*

Synopsis	Bin group for the session
Context	configure oam-pm session <i>named-item</i> bin-group <i>reference</i>

Tree	bin-group
Reference	configure oam-pm bin-group <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure oam-pm session <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ethernet

Synopsis	Enable the ethernet context
Context	configure oam-pm session <i>named-item</i> ethernet
Tree	ethernet
Description	Commands in this context configure the Ethernet specific source and destination information, the priority, and the Ethernet tests tools on the launch point.
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-mac *mac-unicast-address*

Synopsis	Destination MAC address for the session
Context	configure oam-pm session <i>named-item</i> ethernet dest-mac <i>mac-unicast-address</i>
Tree	dest-mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dm

Synopsis	Enable the dm context
Context	configure oam-pm session <i>named-item</i> ethernet dm
Tree	dm
Description	Commands in this context configure the delay measurement message test command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>named-item</i> ethernet dm admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

data-tlv-size number



WARNING:

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

Synopsis	Data TLV size in the frames sent for the test
Context	configure oam-pm session <i>named-item</i> ethernet dm data-tlv-size <i>number</i>
Tree	data-tlv-size
Description	<p>This command configures a Data TLV to PDU and increases the frame on the wire by the specified amount.</p> <p>Note: This command only configures the size of the padding added to the PDU and does not configure the total size of the frame on the wire.</p>
Range	0 3 to 2000
Units	octets
Default	0

Introduced25.3.R2

Platforms7705 SAR Gen 2

interval *number*



WARNING:

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

SynopsisTime between transmission PDUs for the session test

Context**configure** **oam-pm session** *named-item* **ethernet dmm interval** *number*

Tree**interval**

DescriptionThis command configures the message period or probe spacing for the transmission of a frame.

Range50 | 100 | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 10000

Unitsmilliseconds

Introduced25.3.R2

Platforms7705 SAR Gen 2

test-duration *number*



WARNING:

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

SynopsisDuration of an on-demand test

Context**configure** **oam-pm session** *named-item* **ethernet dmm test-duration** *number*

Tree**test-duration**

Range1 to 86400

Unitseconds

Introduced25.3.R2

Platforms7705 SAR Gen 2

test-id (*number* | *keyword*)



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

Synopsis	Test ID
Context	configure oam-pm session <i>named-item</i> ethernet dmm test-id (<i>number</i> <i>keyword</i>)
Tree	test-id
Description	[None]
Range	0 to 2147483647
Options	auto – Automatically assign a test ID
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority and forwarding class for the session
Context	configure oam-pm session <i>named-item</i> ethernet priority <i>number</i>
Tree	priority
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-mep *number*

Synopsis	Remote MEP for the session
Context	configure oam-pm session <i>named-item</i> ethernet remote-mep <i>number</i>
Tree	remote-mep
Range	1 to 8191
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

slm

Synopsis	Enable the slm context
Context	configure oam-pm session <i>named-item</i> ethernet slm
Tree	slm
Description	Commands in this context configure the synthetic loss measurement (SLM) test and create the container used to configure the individual test parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>named-item</i> ethernet slm admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

data-tlv-size *number*

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

Synopsis	Data TLV size in the frames sent for the test
Context	configure oam-pm session <i>named-item</i> ethernet slm data-tlv-size <i>number</i>
Tree	data-tlv-size
Description	<p>This command configures a Data TLV to PDU and increases the frame on the wire by the specified amount.</p> <p>Note: This command only configures the size of the padding added to the PDU and does not configure the total size of the frame on the wire.</p>
Range	0 3 to 2000
Units	octets
Default	0

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flr-threshold *number*

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

Synopsis	FLR threshold for the test
Context	configure <i>oam-pm session named-item ethernet slm flr-threshold number</i>
Tree	<i>flr-threshold</i>
Description	This command configures the Frame Loss Ratio (FLR) threshold used to determine whether the Delta-T is high loss. An individual Delta-T with a frame loss threshold equal to the configured threshold is marked high loss. An individual Delta-T with a frame loss threshold lower than the configured threshold is not marked as high loss.
Range	0 to 100
Units	percent
Default	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hli-force-count *boolean*

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

Synopsis	Increment HLI and CHLI counters despite availability
Context	configure <i>oam-pm session named-item ethernet slm hli-force-count boolean</i>
Tree	<i>hli-force-count</i>
Description	When configured to true , the router uses High Loss Interval (HLI) and Consecutive High Loss Interval (CHLI) counters to increment regardless of availability. Without this command, HLI and CHLI counters can only increment during times of availability, which includes undetermined availability.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number***WARNING:**

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

Synopsis	Time between transmission PDUs for the session test
Context	configure oam-pm session <i>named-item</i> ethernet slm interval <i>number</i>
Tree	interval
Description	This command configures the message period or probe spacing for the transmission of a frame.
Range	50 100 200 300 400 500 600 700 800 900 1000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loss-events**WARNING:**

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

Synopsis	Enter the loss-events context
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events
Tree	loss-events
Description	Commands in this context define the loss events and thresholds that are to be tracked.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-flr-event [[direction](#)] *keyword*

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Description	Commands in this context configure the frame loss ratio threshold to be applied and checked at the end of the measurement interval for the specified direction. This is a percentage based on the average frame loss ratio over the entire measurement interval.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events avg-flr-event <i>keyword</i> clear-threshold <i>decimal-number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when to generate the clear event.</p> <p>If this command is not specified, the traffic crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and without regard to any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to the following measurement intervals. If a threshold crossing event is raised another is not raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0.000 to 99.999
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *decimal-number*

Synopsis	Rising threshold for the average FLR
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events avg-flr-event <i>keyword</i> raise-threshold <i>decimal-number</i>
Tree	raise-threshold
Description	This command configures the rising percentage that determines when the event is to be generated.
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chli-event [*direction*] *keyword*

Synopsis	Enter the chli-event list instance
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events chli-event <i>keyword</i>
Tree	chli-event
Description	Commands in this context configure the CHLI threshold to be monitored and the associated thresholds using the counter of the specified direction.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events chli-event <i>keyword</i>
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events chli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events chli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hli-event [*direction*] *keyword*

Synopsis	Enter the hli-event list instance
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events hli-event <i>keyword</i>
Tree	hli-event

Description	Commands in this context configure the HLI threshold to be monitored and the associated thresholds using the counter of the specified direction.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events hli-event <i>keyword</i>
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events hli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events hli-event raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Description	Commands in this context configure the threshold to be applied to the overall count of the unavailability indicators, not transitions, per configured direction.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
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Context	configure <i>oam-pm session named-item ethernet slm loss-events unavailability-event keyword clear-threshold number</i>
Tree	<i>clear-threshold</i>
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure <i>oam-pm session named-item ethernet slm loss-events unavailability-event keyword raise-threshold number</i>
Tree	<i>raise-threshold</i>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

undet-availability-event [*direction*] *keyword*

Synopsis	Enter the undet-availability-event list instance
Context	configure <i>oam-pm session named-item ethernet slm loss-events undet-availability-event keyword</i>
Tree	<i>undet-availability-event</i>
Description	Commands in this context configure the threshold to be applied to the overall count of the undetermined availability indicators, not transitions, per configured direction.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[**direction**] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
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Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

undet-unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Description	Commands in this context configure the threshold to be applied to the overall count of the undetermined unavailability indicators, not transitions, per configured direction.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold

Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>named-item</i> ethernet slm loss-events undet-unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-duration *number*



WARNING:

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

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>named-item</i> ethernet slm test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	25.3.R2

Platforms7705 SAR Gen 2

test-id (number | keyword)



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

Synopsis	Test ID
Context	configure oam-pm session <i>named-item</i> ethernet slm test-id (number keyword)
Tree	test-id
Description	[None]
Range	0 to 2147483647
Options	auto – Automatically assign a test ID
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timing



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

Synopsis	Enter the timing context
Context	configure oam-pm session <i>named-item</i> ethernet slm timing
Tree	timing
Description	Commands in this context define various availability parameters and the probe spacing (interval) for the SLM frames.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

chli-threshold number



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

Synopsis	CHLI threshold
Context	configure oam-pm session <i>named-item</i> ethernet slm timing chli-threshold <i>number</i>
Tree	chli-threshold
Description	This command configures the number of Consecutive High Loss Intervals (CHLI) that when equal to or exceeded increments the CHLI counter. A CHLI counter is an indication that the sliding window is available but has crossed a threshold consecutive of unavailable Delta-T intervals. A CHLI can only be incremented once during a sliding window and, by default, it is only incremented during times of availability.
Range	1 to 9
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

consec-delta-t *number*



WARNING:

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

Synopsis	Consecutive Delta-t intervals
Context	configure oam-pm session <i>named-item</i> ethernet slm timing consec-delta-t <i>number</i>
Tree	consec-delta-t
Description	This command configures the number of consecutive Delta-T small measurement intervals that make up the sliding window over which availability and unavailability is determined. Transitions from one state to another occurs when the this command is in a new state.
Range	2 to 10
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frames-per-delta-t *number*



WARNING:

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

Synopsis	Frames sent in one Delta-T
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Context	configure oam-pm session <i>named-item</i> ethernet slm timing frames-per-delta-t <i>number</i>
Tree	frames-per-delta-t
Description	This command configures the number of SLM frames sent, defining the size of the Delta-T (small measurement window). Each Delta-T is marked as high loss or not high loss based on the FLR threshold. The size of the Delta-T measurement is the product of the number of frames and the interval.
Range	1 to 50
Units	frames
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source

Synopsis	Enable the source context
Context	configure oam-pm session <i>named-item</i> ethernet source
Tree	source
Description	Commands in this context define the source MEP launch point command options that are used by the individual tests within the session. If an MEP matching the configuration does not exist, the session is allowed to become active; however, the frames sent and received and seen under the show oam-pm statistics session <i>session-name</i> command are zero.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name (*named-item-64* | *admin-name*)

Synopsis	Source Ethernet MA name
Context	configure oam-pm session <i>named-item</i> ethernet source ma-admin-name (<i>named-item-64</i> <i>admin-name</i>)
Tree	ma-admin-name
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name (*named-item-64* | *admin-name*)

Synopsis	Source Ethernet MD name
Context	configure oam-pm session <i>named-item</i> ethernet source md-admin-name (<i>named-item-64</i> <i>admin-name</i>)
Tree	md-admin-name
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep *number*

Synopsis	Source Ethernet MEP ID
Context	configure oam-pm session <i>named-item</i> ethernet source mep <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Enable the ip context
Context	configure oam-pm session <i>named-item</i> ip
Tree	ip
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-egress-remark-dscp *boolean*

Synopsis	Allow DSCP modification by the egress QoS policy
Context	configure oam-pm session <i>named-item</i> ip allow-egress-remark-dscp <i>boolean</i>

Tree	allow-egress-remark-dscp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Destination IP address for the session
Context	configure oam-pm session <i>named-item</i> ip destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-udp-port *number*

Synopsis	Destination UDP port for the session
Context	configure oam-pm session <i>named-item</i> ip destination-udp-port <i>number</i>
Tree	destination-udp-port
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

do-not-fragment *boolean*

Synopsis	Do not allow packet fragmentation in the IPv4 header
Context	configure oam-pm session <i>named-item</i> ip do-not-fragment <i>boolean</i>
Tree	do-not-fragment
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp (*keyword* | *keyword*)

Synopsis	DSCP value configured to the DSCP name
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Context	configure oam-pm session <i>named-item</i> ip dscp (<i>keyword</i> <i>keyword</i>)
Tree	dscp
Description	<p>This command allows for the explicit setting of the DSCP rather than deriving the DSCP value from the egress network QoS policy 1 using the fc and profile values.</p> <p>Although disconnected from the fc and profile settings unless required, the three parameters should be aligned to ensure proper treatment within the node and along the path.</p>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Options	resolve
Default	resolve
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class for the session
Context	configure oam-pm session <i>named-item</i> ip fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding

Synopsis	Enable the forwarding context
Context	configure oam-pm session <i>named-item</i> ip forwarding
Tree	forwarding
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bypass-routing

Synopsis	Bypass the routing table when sending test packets
Context	configure oam-pm session <i>named-item</i> ip forwarding bypass-routing
Tree	bypass-routing
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Interface name
Context	configure oam-pm session <i>named-item</i> ip forwarding interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address for forwarding
Context	configure oam-pm session <i>named-item</i> ip forwarding next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern (*keyword* | *number*)

Synopsis	Pattern used to fill the packet padding field
Context	configure oam-pm session <i>named-item</i> ip pattern (<i>keyword</i> <i>number</i>)

Tree	pattern
Range	0 to 65535
Options	sequential
Default	0
	sequential
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Profile type for the session
Context	configure oam-pm session <i>named-item</i> ip profile keyword
Tree	profile
Options	in, out
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance for the session
Context	configure oam-pm session <i>named-item</i> ip router-instance string
Tree	router-instance
Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address for the session
Context	configure oam-pm session <i>named-item</i> ip source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-udp-port *number*

Synopsis	Source UDP port for the session
Context	configure oam-pm session <i>named-item</i> ip source-udp-port <i>number</i>
Tree	source-udp-port
Range	64374 to 64383
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	TTL value for the session
Context	configure oam-pm session <i>named-item</i> ip ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel

Synopsis	Enter the tunnel context
Context	configure oam-pm session <i>named-item</i> ip tunnel
Tree	tunnel
Description	Commands in this context configure packet tunneling options for the session. This command and the oam-pm session ip forwarding command are mutually exclusive.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls

Synopsis	Enable the mpls context
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls
Tree	mpls
Description	Commands in this context configure the MPLS packet tunneling options for the session. Configure the oam-pm session ip router-instance to Base to configure commands in

the tunnel MPLS context. When entering a context under MPLS, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.

Notes	The following elements are part of a choice: mpls or segment-routing-v6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te

Synopsis	Enable the rsvp-te context
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls rsvp-te
Tree	rsvp-te
Description	Commands in this context allow for the specification of RSVP-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel-type options configured under the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp *named-item-64*

Synopsis	Name of LSP that carries the test packets
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls rsvp-te lsp <i>named-item-64</i>
Tree	lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te-auto

Synopsis	Enable the rsvp-te-auto context
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls rsvp-te-auto
Tree	rsvp-te-auto

Description	Commands in this context configure the RSVP-TE-Auto feature and rsvp-te-auto (RSVP TE with dynamically-created LSPs) packet tunneling options for the session. If you enter a context within the MPLS context, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

from *ipv4-unicast-address*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls rsvp-te-auto from <i>ipv4-unicast-address</i>
Tree	from
Description	This command configures the headend of the RSV LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: from , to , and lsp-template . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-template *named-item*

Synopsis	LSP template used to identify the LSP to be tested
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls rsvp-te-auto lsp-template <i>named-item</i>
Tree	lsp-template
Description	This command configures the name of the LSP template used to identify the unique LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: from , to , and lsp-template . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to *ipv4-unicast-address*

Synopsis	IPv4 unicast address to identify the LSP to be tested
Context	configure <i>oam-pm session named-item</i> <i>ip tunnel mpls rsvp-te-auto to ipv4-unicast-address</i>
Tree	<i>to</i>
Description	This command configures the termination point of the RSVP LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: from , to , and lsp-template . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis

Synopsis	Enable the sr-isis context
Context	configure <i>oam-pm session named-item</i> <i>ip tunnel mpls sr-isis</i>
Tree	<i>sr-isis</i>
Description	Commands in this context allow for the specification of SR-ISIS specific tunnel information used to transport the test packets. Entering this context removes all the other tunnel type commands configured in the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo *number*

Synopsis	Flex-algorithm to tunnel IP packets for session tests
Context	configure <i>oam-pm session named-item</i> <i>ip tunnel mpls sr-isis flex-algo number</i>
Tree	<i>flex-algo</i>
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-isis igp-instance <i>number</i>
Tree	igp-instance
Description	This command configures the IGP instance to tunnel IP packets for the session test.
Range	0 to 127
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-isis prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Description	This command configures the IP prefix used with the IGP instance to tunnel IP packets for the session tests.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf

Synopsis	Enable the sr-ospf context
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-ospf
Tree	sr-ospf
Description	Commands in this context allow for the specification of SR-OSPF specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo *number*

Synopsis	Flex-algorithm to tunnel IP packets for session tests
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-ospf flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-ospf igp-instance <i>number</i>
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix *ipv4-unicast-prefix*

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-ospf prefix <i>ipv4-unicast-prefix</i>
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy

Synopsis	Enable the sr-policy context
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-policy
Tree	sr-policy
Description	Commands in this context identify the SR policy used to tunnel IP packets for the session tests.

Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color *number*

Synopsis	Color for associating the SR policy with an objective
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-policy color <i>number</i>
Tree	color
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Segment Routing endpoint for the session
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-policy endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Description	This command configures the unicast IPv4 or globally routable IPv6 address endpoint of the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-list *number*

Synopsis	Segment Routing segment list for the session
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-policy segment-list <i>number</i>
Tree	segment-list
Description	This command configures the identification of the segment list for the specific policy.
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te

Synopsis	Enable the sr-te context
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-te
Tree	sr-te
Description	Commands in this context allow for the specification of SR-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp *named-item-64*

Synopsis	Name of LSP that carries the test packets
Context	configure oam-pm session <i>named-item</i> ip tunnel mpls sr-te lsp <i>named-item-64</i>
Tree	lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

twamp-light

Synopsis	Enable the twamp-light context
Context	configure oam-pm session <i>named-item</i> ip twamp-light
Tree	twamp-light
Description	Commands in this context configure the TWAMP-Light (Two Way Active Measurement Protocol, Light) or STAMP (Simple Two Way Active Measurement Protocol) test for the session.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>named-item</i> ip twamp-light admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ipv6-udp-checksum-zero *boolean***WARNING:**

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

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure oam-pm session <i>named-item</i> ip twamp-light allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to false, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number***WARNING:**

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

Synopsis	Time between transmission PDUs for the session test
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Context	configure <i>oam-pm session named-item ip twamp-light interval number</i>
Tree	<i>interval</i>
Description	This command configures the message period or probe spacing for the transmission of a frame.
Range	50 100 200 300 400 500 600 700 800 900 1000 10000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loss



WARNING:

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

Synopsis	Enter the loss context
Context	configure <i>oam-pm session named-item ip twamp-light loss</i>
Tree	<i>loss</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flr-threshold *number*



WARNING:

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

Synopsis	FLR threshold for the test
Context	configure <i>oam-pm session named-item ip twamp-light loss flr-threshold number</i>
Tree	<i>flr-threshold</i>
Description	This command configures the Frame Loss Ratio (FLR) threshold used to determine whether the Delta-T is high loss. An individual Delta-T with a frame loss threshold equal to the configured threshold is marked high loss. An individual Delta-T with a frame loss threshold lower than the configured threshold is not marked as high loss.
Range	0 to 100
Units	percent
Default	50

Introduced25.3.R2

Platforms7705 SAR Gen 2

hli-force-count *boolean*



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

SynopsisIncrement HLI and CHLI counters despite availability

Context**configure** *oam-pm session named-item* *ip twamp-light loss* **hli-force-count** *boolean*

Tree**hli-force-count**

DescriptionWhen configured to **true**, the router uses High Loss Interval (HLI) and Consecutive High Loss Interval (CHLI) counters to increment regardless of availability. Without this command, HLI and CHLI counters can only increment during times of availability, which includes undetermined availability.

Defaultfalse

Introduced25.3.R2

Platforms7705 SAR Gen 2

timing



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

SynopsisEnter the **timing** context

Context**configure** *oam-pm session named-item* *ip twamp-light loss* **timing**

Tree**timing**

Introduced25.3.R2

Platforms7705 SAR Gen 2

chli-threshold *number*



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

Synopsis	CHLI threshold
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss timing chli-threshold <i>number</i>
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

consec-delta-t *number*

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

Synopsis	Number of consecutive delta-t intervals
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss timing consec-delta-t <i>number</i>
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frames-per-delta-t *number*

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

Synopsis	Number of frames sent in one delta-t
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss timing frames-per-delta-t <i>number</i>
Tree	frames-per-delta-t
Range	1 to 50
Units	frames
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loss-events



WARNING:

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

Synopsis	Enter the loss-events context
Context	configure oam-pm session named-item ip twamp-light loss-events
Tree	loss-events
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-flr-event [[direction](#)] *keyword*

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session named-item ip twamp-light loss-events avg-flr-event keyword
Tree	avg-flr-event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[direction](#)] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session named-item ip twamp-light loss-events avg-flr-event keyword
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session named-item ip twamp-light loss-events avg-flr-event keyword clear-threshold decimal-number

Tree [clear-threshold](#)

Description This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when to generate the clear event.

If this command is not specified, the traffic crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and without regard to any previous window. Each unique event can only be raised once within the measurement interval.

If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to the following measurement intervals. If a threshold crossing event is raised another is not raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.

Range 0.000 to 99.999

Units percent

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

raise-threshold *decimal-number*

Synopsis Rising threshold for the average FLR

Context **configure** [oam-pm session](#) *named-item* [ip twamp-light loss-events avg-flr-event](#)
keyword [raise-threshold](#) *decimal-number*

Tree [raise-threshold](#)

Description This command configures the rising percentage that determines when the event is to be generated.

Range 0.000 to 100.000

Units percent

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

chli-event [[direction](#)] *keyword*

Synopsis Enter the **chli-event** list instance

Context **configure** [oam-pm session](#) *named-item* [ip twamp-light loss-events chli-event](#) *keyword*

Tree [chli-event](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[direction] *keyword*

Synopsis Traffic flow direction

Context **configure** **oam-pm session** *named-item* **ip twamp-light loss-events chli-event** *keyword*

Tree **chli-event**

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

clear-threshold *number*

Synopsis Clear threshold

Context **configure** **oam-pm session** *named-item* **ip twamp-light loss-events chli-event** *keyword* **clear-threshold** *number*

Tree **clear-threshold**

Description This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.

If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.

If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.

Range 0 to 863999

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

raise-threshold *number*

Synopsis Rising threshold that determines when to generate event

Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events chli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hli-event [**direction**] *keyword*

Synopsis	Enter the hli-event list instance
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events hli-event <i>keyword</i>
Tree	hli-event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events hli-event <i>keyword</i>
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events hli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement</p>

interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.

If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.

Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events hli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

undet-availability-event [*direction*] *keyword*

Synopsis	Enter the undet-availability-event list instance
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

raise-threshold *number*

Synopsis Rising threshold that determines when to generate event
Context **configure** [oam-pm session](#) *named-item* [ip twamp-light loss-events undet-availability-event](#) *keyword* **raise-threshold** *number*
Tree [raise-threshold](#)
Range 1 to 864000
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

undet-unavailability-event [[direction](#)] *keyword*

Synopsis Enter the **undet-unavailability-event** list instance
Context **configure** [oam-pm session](#) *named-item* [ip twamp-light loss-events undet-unavailability-event](#) *keyword*
Tree [undet-unavailability-event](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[direction] *keyword*

Synopsis Traffic flow direction
Context **configure** [oam-pm session](#) *named-item* [ip twamp-light loss-events undet-unavailability-event](#) *keyword*
Tree [undet-unavailability-event](#)
Options forward, backward, aggregate
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Description	<p>This command configures a value used for stateful behavior to configure a percentage of loss value lower than the rising percentage to indicate when the clear event should be generated.</p> <p>If this command is not specified, the traffic-crossing alarm is stateless. Stateless means the state is not carried forward to other measurement intervals. Each measurement interval is analyzed independently and regardless of any previous window. Each unique event can only be raised once within the measurement interval.</p> <p>If this command is specified, the traffic crossing alarm uses stateful behavior. Stateful means each unique previous event state is carried forward to following the measurement intervals. If a threshold crossing event is raised another is raised until a measurement interval completes and the clear threshold has not been exceeded. A clear event is raised under that condition.</p>
Range	0 to 863999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>named-item</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pad-size *number***WARNING:**

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

Synopsis	Amount of packet padding sent for the TWAMP-Light test
Context	configure oam-pm session <i>named-item</i> ip twamp-light pad-size <i>number</i>
Tree	pad-size
Range	0 to 2000
Units	octets
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pad-tlv-size *number*



WARNING:

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

Synopsis	Pad TLV size in each sent STAMP packet
Context	configure oam-pm session <i>named-item</i> ip twamp-light pad-tlv-size <i>number</i>
Tree	pad-tlv-size
Description	<p>This command configures the PAD TLV included in the STAMP test packet with a total byte count specified by this command.</p> <p>TWAMP Light test packets do not allow TLVs. To pad the size of the TWAMP Light test packet the user must configure the pad-size command. STAMP test packets (the standard form of TWAMP Light) introduces TLVs for padding. Therefore, STAMP test packets must use the pad-tlv-size value.</p>
Range	4 to 2000
Units	octets
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record-stats *keyword*



WARNING:

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

Synopsis	Type of statistics recorded for the TWAMP-Light test
Context	configure oam-pm session <i>named-item</i> ip twamp-light record-stats <i>keyword</i>
Tree	record-stats

Options	delay, loss, delay-and-loss
Default	delay
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-sender-type *keyword*

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

Synopsis	Packet type sent by the test
Context	configure oam-pm session <i>named-item</i> ip twamp-light session-sender-type <i>keyword</i>
Tree	session-sender-type
Description	<p>This command configures the type of test packet format to transmit.</p> <p>When the stamp option is configured, STAMP transmission, packet formatting, and packet processing is allowed and STAMP test packets support TLVs. When the twamp-light option is configured, TWAMP Light transmission, packet formatting, and packet processing is allowed, but TWAMP Light test packets do not allow TLVs.</p>
Options	twamp-light – Two-Way Active Measurement Protocol, Light stamp – Simple Two-Way Active Measurement Protocol
Default	twamp-light
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-duration *number*

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

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>named-item</i> ip twamp-light test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	25.3.R2

Platforms7705 SAR Gen 2

test-id (number | keyword)



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

Synopsis	Test ID
Context	configure oam-pm session <i>named-item</i> ip twamp-light test-id (number keyword)
Tree	test-id
Description	[None]
Range	0 to 2147483647
Options	auto – Automatically assign a test ID
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timestamp-format keyword



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

Synopsis	TWAMP Light or STAMP test packet timestamp format
Context	configure oam-pm session <i>named-item</i> ip twamp-light timestamp-format keyword
Tree	timestamp-format
Description	<p>This command configures the format of the timestamp structure and epoch to include in the STAMP and TWAMP Light test packets. The command option value also sets the z-bit in the test packet.</p> <p>When timestamp-format value is ntp, the z-bit in the test packet is 0. When the timestamp-format is ptp, the z-bit in the test packets is 1.</p>
Options	ntp – Network Time Protocol ptp – Precision Time Protocol
Default	ntp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

measurement-interval [[duration](#)] *keyword*

Synopsis	Enter the measurement-interval list instance
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i>
Tree	measurement-interval
Description	Commands in this context establish individual measurement intervals to be used by the session. A maximum of three different measurement intervals may be configured under each session.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[duration] *keyword*

Synopsis	Duration of the measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i>
Tree	measurement-interval
Options	15-mins, 1-hour, 1-day, 5-mins, 1-min
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy for the measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boundary-type *keyword*

Synopsis	Alignment of the start of the measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> boundary-type <i>keyword</i>

Tree	boundary-type
Options	clock-aligned, test-relative
Default	clock-aligned
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clock-offset *number*

Synopsis	Offset for a clock-aligned measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> clock-offset <i>number</i>
Tree	clock-offset
Range	0 to 86399
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

intervals-stored *number*

Synopsis	Maximum number of measurement intervals stored
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> intervals-stored <i>number</i>
Tree	intervals-stored
Range	1 to 96
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold-cross-alerts

Synopsis	Enter the threshold-cross-alerts context
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> threshold-cross-alerts
Tree	threshold-cross-alerts
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of TCAs for measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> threshold-cross-alerts admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-events *boolean*

Synopsis	Enable delay TCAs for the measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> threshold-cross-alerts delay-events <i>boolean</i>
Tree	delay-events
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loss-events *boolean*

Synopsis	Enable loss TCAs for the measurement interval
Context	configure oam-pm session <i>named-item</i> measurement-interval <i>keyword</i> threshold-cross-alerts loss-events <i>boolean</i>
Tree	loss-events
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-type *keyword***WARNING:**

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

Synopsis	Session type
Context	configure oam-pm session <i>named-item</i> session-type <i>keyword</i>
Tree	session-type
Options	proactive, on-demand
Default	proactive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.18 policy-options commands

```

configure
- policy-options
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - expression policy-as-path-regexp
  - as-path-group named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - expression policy-as-path-regexp
  - community policy-community-name
    - apply-groups reference
    - apply-groups-exclude reference
    - expression
      - apply-groups reference
      - apply-groups-exclude reference
      - exact boolean
      - expr expression-community
    - member member-community
  - damping named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress number
    - reuse number
    - suppress number
  - extended-community-set policy-community-name
    - apply-groups reference
    - apply-groups-exclude reference
    - member member-community
  - global-variables
    - name policy-var-name
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - decimal decimal-number
      - number number
      - value named-item
  - policy-statement named-item-64
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - action-type keyword
      - add-paths-send-limit (number | keyword)
      - admin-tag-policy (param-midstring-64 | string)
      - advertise-label keyword
      - aigp-metric
        - add (number | string)
        - set (keyword | number | string)
      - apply-groups reference
      - apply-groups-exclude reference
      - as-path
        - add (param-midstring | string)
        - replace (param-midstring | string)

```

configure policy-options policy-statement default-action as-path-prepend

```

- as-path-prepend
  - as-path (number | string | keyword)
  - repeat (number | string)
- bgp-high-priority boolean
- bgp-leak boolean
- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- flex-algo (string | number)
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- description description
- entry number
  - action
    - action-type keyword
    - add-paths-send-limit (number | keyword)
    - admin-tag-policy (param-midstring-64 | string)
    - advertise-label keyword
    - aigp-metric
      - add (number | string)
      - set (keyword | number | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - as-path
      - add (param-midstring | string)
      - replace (param-midstring | string)
    - as-path-prepend
      - as-path (number | string | keyword)
      - repeat (number | string)
    - bgp-high-priority boolean
    - bgp-leak boolean
    - bgp-med
      - adjust string
      - set (keyword | number | string)

```


configure policy-options policy-statement entry action bgp-tunnel-metric

```

- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- flex-algo (string | number)
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description description
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area ipv4-address
  - as-path
    - group (param-midstring | string)
    - length
      - qualifier keyword
      - unique boolean
      - value (number | string)
    - name (param-midstring | string)
  - cluster-id
    - ip-address ipv4-prefix-with-host-bits
    - none-cluster-list boolean
  - color number
- community
  - count
    - qualifier keyword
    - type keyword
    - value (number | string)
  - expression string
  - name (param-midstring-64 | string)
- distinguisher number

```

configure policy-options policy-statement entry from endpoint

```

- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- extended-community-set reference
- extended-community-set-options keyword
- external boolean
- family keyword
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
  - ip-int-name interface-name
  - service string
- level number
- local-preference
  - qualifier keyword
  - value (number | string)
- metric
  - qualifier keyword
  - value (number | string)
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name policy-var-name
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - decimal decimal-number
  - number number
  - value named-item
- prefix-list (param-midstring-64 | string)
- prefix-list-override string
  - apply-groups reference
  - apply-groups-exclude reference
  - end-length number
  - start-length number
  - through-length number
  - type keyword
- protocol
  - instance (keyword | number)
  - name keyword
- route-distinguisher-list (param-midstring-64 | string)
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- state keyword
- tag (number | keyword)
- to
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
  - neighbor
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
    - prefix-list (param-midstring | string)

```

configure policy-options policy-statement entry to prefix-list

```

- prefix-list (param-midstring-64 | string)
- protocol
  - instance (keyword | number)
  - name keyword
- entry-type keyword
- named-entry named-item-255
- action
  - action-type keyword
  - add-paths-send-limit (number | keyword)
  - admin-tag-policy (param-midstring-64 | string)
  - advertise-label keyword
  - aigp-metric
    - add (number | string)
    - set (keyword | number | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path
    - add (param-midstring | string)
    - replace (param-midstring | string)
  - as-path-prepend
    - as-path (number | string | keyword)
    - repeat (number | string)
  - bgp-high-priority boolean
  - bgp-leak boolean
  - bgp-med
    - adjust string
    - set (keyword | number | string)
  - bgp-tunnel-metric
    - prefer-aigp boolean
    - prefer-med boolean
    - value (string | number)
  - community
    - add (param-midstring-64 | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - remove (param-midstring-64 | string)
    - replace (param-midstring-64 | string)
  - create-mpls-tunnel boolean
  - create-udp-tunnel boolean
  - damping (keyword | param-midstring | string)
  - flex-algo (string | number)
  - install-backup-path boolean
  - local-preference (number | string)
  - metric
    - add (number | string)
    - set (number | string)
    - subtract (number | string)
  - next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
  - origin (keyword | string)
  - origin-validation-state (keyword | string)
  - preference (number | string)
  - resolve-static boolean
  - route-table-install boolean
  - sr-label-index
    - prefer-igp boolean
    - value (string | number)
  - sr-maintenance-policy (param-midstring | string)
  - sticky-ecmp boolean
  - tag (number | string)
  - type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference

```

configure policy-options policy-statement named-entry conditional-expression apply-groups-exclude

```

- apply-groups-exclude reference
- route-exists string
- description description
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area ipv4-address
  - as-path
    - group (param-midstring | string)
    - length
      - qualifier keyword
      - unique boolean
      - value (number | string)
    - name (param-midstring | string)
  - cluster-id
    - ip-address ipv4-prefix-with-host-bits
    - none-cluster-list boolean
  - color number
  - community
    - count
      - qualifier keyword
      - type keyword
      - value (number | string)
    - expression string
    - name (param-midstring-64 | string)
  - distinguisher number
  - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
  - evpn-type keyword
  - extended-community-set reference
  - extended-community-set-options keyword
  - external boolean
  - family keyword
  - group-address (param-midstring | string)
  - host-ip (param-midstring | string)
  - interface (named-item | interface-name | interface-name | interface-name)
  - interface-subnets
    - ip-int-name interface-name
    - service string
  - level number
  - local-preference
    - qualifier keyword
    - value (number | string)
  - metric
    - qualifier keyword
    - value (number | string)
  - neighbor
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
    - prefix-list (param-midstring | string)
  - next-hop
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - prefix-list (param-midstring | string)
  - origin keyword
  - origin-validation-state keyword
  - ospf-type number
  - path-type keyword
  - policy (string | string)
  - policy-variables
    - name policy-var-name
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - decimal decimal-number

```

configure policy-options policy-statement named-entry from policy-variables name number

```

    - number number
    - value named-item
  - prefix-list (param-midstring-64 | string)
  - prefix-list-override string
    - apply-groups reference
    - apply-groups-exclude reference
    - end-length number
    - start-length number
    - through-length number
    - type keyword
  - protocol
    - instance (keyword | number)
    - name keyword
  - route-distinguisher-list (param-midstring-64 | string)
  - source-address
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - prefix-list (param-midstring | string)
    - state keyword
    - tag (number | keyword)
  - to
    - apply-groups reference
    - apply-groups-exclude reference
    - level number
    - neighbor
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
      - prefix-list (param-midstring | string)
      - prefix-list (param-midstring-64 | string)
      - protocol
        - instance (keyword | number)
        - name keyword
  - prefix-list named-item-64
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix (ipv4-prefix | ipv6-prefix) type keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - end-length number
      - mask-pattern (ipv4-address-no-zone | ipv6-address-no-zone)
      - start-length number
      - through-length number
      - to-prefix (ipv4-prefix | ipv6-prefix)
  - route-distinguisher-list named-item-64
    - apply-groups reference
    - apply-groups-exclude reference
  - rd-entry string

```

4.18.1 policy-options command descriptions

policy-options

Synopsis	Enter the policy-options context
Context	configure policy-options
Tree	policy-options
Description	Commands in this context configure route policies. Route policies are applied to the routing protocol.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path [[name](#)] *named-item*

Synopsis	Enter the as-path list instance
Context	configure policy-options as-path <i>named-item</i>
Tree	as-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[name\]](#) *named-item*

Synopsis	AS path name
Context	configure policy-options as-path <i>named-item</i>
Tree	as-path
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expression *policy-as-path-regexp*

Synopsis	Regular expression string
Context	configure policy-options as-path <i>named-item</i> expression <i>policy-as-path-regexp</i>

Tree	expression
Description	<p>This command configures a route policy AS path regular expression statement to use in route policy entries.</p> <p>An AS path in a BGP route matches an AS path regular expression, if the path matches the pattern of the regular expression. A regular expression incorporates terms and operators that use the terms. An individual AS number is an elementary term in the AS path regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:</p> <ul style="list-style-type: none"> • . • * • ? • {n} • {m,n} • {m, } <p>To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.</p>
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path-group [[name](#)] *named-item*

Synopsis	Enter the as-path-group list instance
Context	configure policy-options as-path-group <i>named-item</i>
Tree	as-path-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	AS path group name
Context	configure policy-options as-path-group <i>named-item</i>
Tree	as-path-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry *[entry] number*

Synopsis	Enter the entry list instance
Context	configure <i>policy-options as-path-group named-item entry number</i>
Tree	<i>entry</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry] *number*

Synopsis	AS path entry ID
Context	configure <i>policy-options as-path-group named-item entry number</i>
Tree	<i>entry</i>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expression *policy-as-path-regexp*

Synopsis	Regular expression string
Context	configure <i>policy-options as-path-group named-item entry number expression policy-as-path-regexp</i>
Tree	<i>expression</i>
Description	<p>This command configures an AS path group regular expression.</p> <p>An AS path in a BGP route matches an AS path group, if the pattern of the path matches the concatenation of all regular expressions in the group. A regular expression incorporates terms and operators that use the terms. An individual AS number is an elementary term in the AS path regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:</p> <ul style="list-style-type: none"> • . • * • ? • {n}

- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

String length 1 to 255

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

community [[name](#)] *policy-community-name*

Synopsis Enter the **community** list instance

Context **configure** [policy-options](#) [community](#) *policy-community-name*

Tree [community](#)

Description Commands in this context create a route policy community list or expression to use in route policy entries. A community list is an unordered set of community values (members). In general, for each member in the configured community list, there must be a match with at least one community in the route. A community expression is a set of community values that are arranged in a logical expression using operators such as AND, OR, and NOT. A route matches a community expression if it satisfies the logic of the expression.

For more information, see the **expression** and **members** commands in the **configure policy-options community** context.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *policy-community-name*

Synopsis Name of extended community set

Context **configure** [policy-options](#) [community](#) *policy-community-name*

Tree [community](#)

Description This command configures a route policy community name.

String length 1 to 64

String format 'policy-community-name' must not be all spaces

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

expression

Synopsis Enable the **expression** context

Context **configure** [policy-options](#) [community](#) *policy-community-name* [expression](#)

Tree [expression](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

exact *boolean*

Synopsis Match exactly for the specified expression

Context **configure** [policy-options](#) [community](#) *policy-community-name* [expression](#) [exact](#) *boolean*

Tree [exact](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

expr *expression-community*

Synopsis Community expression value

Context **configure** [policy-options](#) [community](#) *policy-community-name* [expression](#) [expr](#) *expression-community*

Tree [expr](#)

String length 1 to 900

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

member [[member](#)] *member-community*

Synopsis Add a list entry for **member**

Context **configure** [policy-options](#) [community](#) *policy-community-name* [member](#) *member-community*

Tree [member](#)

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[member] *member-community*

Synopsis Community member value

Context **configure** [policy-options](#) [community](#) *policy-community-name* [member](#) *member-community*

Tree [member](#)

Description This command configures a BGP community value.

Each member of a community list is a standard, extended, or large community value or a regular expression that potentially matches many community values. A regular expression incorporates terms and operators that use the terms. An individual numerical digit is an elementary term in the community regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:

- .
- *
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

String length 1 to 72

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

damping [[name](#)] *named-item*

Synopsis Enter the **damping** list instance

Context **configure** [policy-options](#) [damping](#) *named-item*

Tree [damping](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis	Damping profile name
Context	configure policy-options damping <i>named-item</i>
Tree	damping
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

half-life *number*

Synopsis	Time after the FOM value is halved
Context	configure policy-options damping <i>named-item</i> half-life <i>number</i>
Tree	half-life
Range	1 to 45
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-suppress *number*

Synopsis	Maximum time for a route to remain suppressed
Context	configure policy-options damping <i>named-item</i> max-suppress <i>number</i>
Tree	max-suppress
Range	1 to 720
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reuse *number*

Synopsis	Value below which a suppressed route can be used again
Context	configure policy-options damping <i>named-item</i> reuse <i>number</i>

Tree	reuse
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress *number*

Synopsis	Value above which a route is suppressed
Context	configure policy-options damping <i>named-item</i> suppress <i>number</i>
Tree	suppress
Range	1 to 20000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-community-set [[name](#)] *policy-community-name*

Synopsis	Enter the extended-community-set list instance
Context	configure policy-options extended-community-set <i>policy-community-name</i>
Tree	extended-community-set
Description	Commands in this context configure an extended community set used in route policies. An extended community set defines a list of exact match route target extended communities (type 0, type 1, or type 2). The set can be referenced in policy statements to match BGP routes that carry or do not carry the specified route targets.
Introduced	25.10.R3
Platforms	7705 SAR Gen 2

[name] *policy-community-name*

Synopsis	Name of extended community set
Context	configure policy-options extended-community-set <i>policy-community-name</i>
Tree	extended-community-set
Description	This command configures a route policy community name.
String length	1 to 64
String format	'policy-community-name' must not be all spaces
Notes	This element is part of a list key.

Introduced 25.10.R3
Platforms 7705 SAR Gen 2

member [*value*] *member-community*

Synopsis Add a list entry for **member**

Context **configure** *policy-options* *extended-community-set* *policy-community-name* **member** *member-community*

Tree **member**

Description Commands in this context add a route target member of an extended community set. The member must be configured in an exact match format and it must start with the substring 'target:'. This substring is followed by two numbers separated from each other by a colon.

The meaning of the two numbers depends on whether the route target is in type 0, type 1 or type 2 format. These members cannot be configured to be regular expressions.

Introduced 25.10.R3
Platforms 7705 SAR Gen 2

[value] *member-community*

Synopsis Member of an extended community set

Context **configure** *policy-options* *extended-community-set* *policy-community-name* **member** *member-community*

Tree **member**

String length 1 to 72

String format 'value' must be target-type extended community (target:.....)

Notes This element is part of a list key.

Introduced 25.10.R3
Platforms 7705 SAR Gen 2

global-variables

Synopsis Enter the **global-variables** context

Context **configure** *policy-options* **global-variables**

Tree **global-variables**

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

name [*variable-name*] *policy-var-name*

Synopsis	Enter the name list instance
Context	configure <i>policy-options</i> <i>global-variables</i> <i>name</i> <i>policy-var-name</i>
Tree	<i>name</i>
Max. instances	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[variable-name] *policy-var-name*

Synopsis	Global variable name used to reference policy functions
Context	configure <i>policy-options</i> <i>global-variables</i> <i>name</i> <i>policy-var-name</i>
Tree	<i>name</i>
String length	1 to 32
String format	'policy-var-name' must start and end with @ (e.g. @name@)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the policy variable
Context	configure <i>policy-options</i> <i>global-variables</i> <i>name</i> <i>policy-var-name</i> <i>address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>address</i>
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
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Context	configure policy-options global-variables name <i>policy-var-name</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options global-variables name <i>policy-var-name</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *named-item*

Synopsis	Policy variable value
Context	configure policy-options global-variables name <i>policy-var-name</i> value <i>named-item</i>
Tree	value
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-statement [[name](#)] *named-item-64*

Synopsis	Enter the policy-statement list instance
Context	configure policy-options policy-statement <i>named-item-64</i>

Tree	policy-statement
Description	<p>Commands in this context configure a route policy statement.</p> <p>Route policy statements control the flow of routing information to and from a specific protocol, set of protocols, or to a specific BGP neighbor.</p> <p>The policy statement is a logical grouping of match and action criteria. A single policy statement can affect routing in one or more protocols and one or more peers or neighbors. A single policy statement can also affect both the import and export of routing information.</p>
Max. instances	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item-64*

Synopsis	Route policy statement name
Context	configure policy-options policy-statement <i>named-item-64</i>
Tree	policy-statement
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action

Synopsis	Enable the default-action context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action
Tree	default-action
Description	Commands in this context configure actions to apply to routes that do not match any entries of a route policy statement.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
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Context	configure policy-options policy-statement <i>named-item-64</i> default-action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	all, multipaths
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>named-item-64</i> default-action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action advertise-label <i>keyword</i>
Tree	advertise-label

Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action aigp-metric
Tree	aigp-metric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>named-item-64</i> default-action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>named-item-64</i> default-action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295

Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action as-path
Tree	as-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	configure policy-options policy-statement <i>named-item-64</i> default-action as-path add (<i>param-midstring</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: add or replace .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	configure policy-options policy-statement <i>named-item-64</i> default-action as-path replace (<i>param-midstring</i> <i>string</i>)
Tree	replace
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: add or replace .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

as-path-prepend

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [default-action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

as-path (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [default-action](#) [as-path-prepend](#) [as-path](#) (*number* | *string* | *keyword*)

Tree [as-path](#)

String length 1 to 32

String format 'param-name' must start and end with @ (e.g. @name@)

Range 1 to 4294967295

Options most-recent

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

repeat (*number* | *string*)

Synopsis Number of times to prepend the specified AS number

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [default-action](#) [as-path-prepend](#) [repeat](#) (*number* | *string*)

Tree [repeat](#)

String length 1 to 32

String format 'param-name' must start and end with @ (e.g. @name@)

Range 1 to 50

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6 <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p> <p>When configured to false, no routes are tagged for faster route table updates.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-med
Tree	bgp-med

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-med adjust <i>string</i>
Tree	adjust
String length	1 to 64
String format	'expression' must contain <code>_igp_</code> or <code>_med_</code> or <code>@parameter@</code> 'expression' must contain one operator: <code>+</code> , <code>-</code> or <code>*</code>
Notes	The following elements are part of a choice: adjust or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String length	1 to 32
String format	'param-name' must start and end with <code>@</code> (e.g. <code>@name@</code>)
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-tunnel-metric
Tree	bgp-tunnel-metric

Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to false, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>named-item-64</i> default-action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the prefer-aigp option is set to false the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action community
Tree	community
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>named-item-64</i> default-action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)

Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>named-item-64</i> default-action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	configure policy-options policy-statement <i>named-item-64</i> default-action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>named-item-64</i> default-action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6 • vpn-ipv4 • vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>named-item-64</i> default-action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String length	1 to 32

String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Options	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>named-item-64</i> default-action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	<p>This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.</p> <p>Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.</p> <p>This command is not supported for multicast address families.</p>
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	configure policy-options policy-statement <i>named-item-64</i> default-action install-backup-path <i>boolean</i>
Tree	install-backup-path
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
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Context	configure policy-options policy-statement <i>named-item-64</i> default-action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action metric
Tree	metric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>named-item-64</i> default-action metric add (<i>number</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*number* | *string*)

Synopsis	Metric to assign
Context	configure policy-options policy-statement <i>named-item-64</i> default-action metric set (<i>number</i> <i>string</i>)
Tree	set

String length	1 to 32
String format	'set' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>named-item-64</i> default-action metric subtract (<i>number</i> <i>string</i>)
Tree	subtract
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String length	1 to 32
String format	'next-hop' must start and end with @ (e.g. @name@)
Options	peer-address, self
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
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Context	configure policy-options policy-statement <i>named-item-64</i> default-action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String length	1 to 32
String format	'origin' must start and end with @ (e.g. @name@)
Options	igp, egp, incomplete
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state
String length	1 to 32
String format	'origin-validation-state' must start and end with @ (e.g. @name@)
Options	valid, not-found, invalid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference (*number* | *string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action preference (<i>number</i> <i>string</i>)
Tree	preference
String length	1 to 32
String format	'preference' must start and end with @ (e.g. @name@)
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
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Context	configure policy-options policy-statement <i>named-item-64</i> default-action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>named-item-64</i> default-action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>named-item-64</i> default-action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>named-item-64</i> default-action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action sr-label-index value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>named-item-64</i> default-action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action tag (<i>number</i> <i>string</i>)
Tree	tag
String length	1 to 32
String format	'tag' must start and end with @ (e.g. @name@)
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> default-action type (<i>number</i> <i>string</i>)
Tree	type
String length	1 to 32
String format	'type' must start and end with @ (e.g. @name@)
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure policy-options policy-statement <i>named-item-64</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i>
Tree	entry
Description	<p>Commands in this context create or edit route policy entries within the route policy statement.</p> <p>Multiple entries can be created using unique entries. The router exits the filter when the first match is found and executes the action specified. For this reason, entries must be sequenced correctly from most to least explicit.</p> <p>An entry does not require matching criteria defined (in which case, everything matches) but, at a minimum, must define an action to be considered complete. Entries without an action are considered incomplete and are rendered inactive.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Entry ID for a route policy entry
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i>
Tree	entry
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enable the action context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit

Range	1 to 16
Options	all, multipaths
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action aigp-metric
Tree	aigp-metric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action as-path
Tree	as-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action as-path add (<i>param-midstring</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: add or replace .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action as-path replace (<i>param-midstring</i> <i>string</i>)
Tree	replace
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: add or replace .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path-prepend

Synopsis	Enter the as-path-prepend context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action as-path-prepend
Tree	as-path-prepend
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path (*number* | *string* | *keyword*)

Synopsis	AS number to prepend to the AS path attribute
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Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	1 to 4294967295
Options	most-recent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	1 to 50
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6

This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-med
Tree	bgp-med
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-med adjust <i>string</i>
Tree	adjust
String length	1 to 64
String format	'expression' must contain <code>_igp_</code> or <code>_med_</code> or <code>@parameter@</code> 'expression' must contain one operator: <code>+</code> , <code>-</code> or <code>*</code>
Notes	The following elements are part of a choice: adjust or set .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	When configured to true , and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the

AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.

When configured to **false**, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to false, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the prefer-aigp option is set to false the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String length	1 to 32

String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action community
Tree	community
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String length	1 to 64

String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6

	<ul style="list-style-type: none"> • vpn-ipv4 • vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Options	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.

Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.

This command is not supported for multicast address families.

String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action install-backup-path <i>boolean</i>
Tree	install-backup-path
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action metric
Tree	metric

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

add (*number* | *string*)

Synopsis Metric to add

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [action](#) [metric](#) [add](#) (*number* | *string*)

Tree [add](#)

String length 1 to 32

String format 'param-name' must start and end with @ (e.g. @name@)

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

set (*number* | *string*)

Synopsis Metric to assign

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [action](#) [metric](#) [set](#) (*number* | *string*)

Tree [set](#)

String length 1 to 32

String format 'set' must start and end with @ (e.g. @name@)

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

subtract (*number* | *string*)

Synopsis Metric to subtract

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [action](#) [metric](#) [subtract](#) (*number* | *string*)

Tree [subtract](#)

String length 1 to 32

String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String length	1 to 32
String format	'next-hop' must start and end with @ (e.g. @name@)
Options	peer-address, self
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String length	1 to 32
String format	'origin' must start and end with @ (e.g. @name@)
Options	igp, egp, incomplete
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state

String length	1 to 32
String format	'origin-validation-state' must start and end with @ (e.g. @name@)
Options	valid, not-found, invalid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference (*number* | *string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action preference (<i>number</i> <i>string</i>)
Tree	preference
String length	1 to 32
String format	'preference' must start and end with @ (e.g. @name@)
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action sr-label-index value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action sticky-ecmp <i>boolean</i>

Tree	sticky-ecmp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action tag (<i>number</i> <i>string</i>)
Tree	tag
String length	1 to 32
String format	'tag' must start and end with @ (e.g. @name@)
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> action type (<i>number</i> <i>string</i>)
Tree	type
String length	1 to 32
String format	'type' must start and end with @ (e.g. @name@)
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

conditional-expression

Synopsis	Enable the conditional-expression context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> conditional-expression
Tree	conditional-expression
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

route-exists *string*

Synopsis Conditional expression to test route existence

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [conditional-expression](#) **route-exists** *string*

Tree [route-exists](#)

String length 1 to 255

String format 'route-exists' must have prefix in [] and optional all or none (e.g. [10.0.0.0/8] all)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

from

Synopsis Enable the **from** context

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* **from**

Tree [from](#)

Description Commands in this context configure policy match criteria based on the source route or the protocol from which it is received. If conditions are not specified, all route sources are considered to match.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from aggregate-contributor <i>boolean</i>
Tree	aggregate-contributor
Description	<p>When configured to true, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, vrf-export policy or vrf-import policy, no routes are matched by that entry.</p> <p>When configured to false, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area *ipv4-address*

Synopsis	OSPF area as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from area <i>ipv4-address</i>
Tree	area
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from as-path
Tree	as-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group (*param-midstring* | *string*)

Synopsis	AS path group as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number from as-path</i> group (<i>param-midstring</i> <i>string</i>)
Tree	group
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: group or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length

Synopsis	Enter the length context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number from as-path</i> length
Tree	length
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number from as-path</i> length qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
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Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from as-path length unique <i>boolean</i>
Tree	unique
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from as-path length value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from as-path name (<i>param-midstring</i> <i>string</i>)
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: group or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster-id

Synopsis	Enter the cluster-id context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from cluster-id
Tree	cluster-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv4-prefix-with-host-bits*

Synopsis	Cluster list attribute IP addresses for route matching
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from cluster-id ip-address <i>ipv4-prefix-with-host-bits</i>
Tree	ip-address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32
Max. instances	5
Notes	The following elements are part of a choice: ip-address or none-cluster-list . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from cluster-id none-cluster-list <i>boolean</i>
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: ip-address or none-cluster-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color *number*

Synopsis	Color ID as a match criterion
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Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from color <i>number</i>
Tree	color
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community
Tree	community
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count

Synopsis	Enter the count context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community count
Tree	count
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier keyword

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community count qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Community count to match the community count criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community count type <i>keyword</i>
Tree	type
Options	standard, extended, large
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (number | string)

Synopsis	Number of BGP communities to match the BGP route
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community count value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expression string

Synopsis	Community expression statement as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community expression <i>string</i>
Tree	expression
Description	<p>This command configures a community expression statement as a match criterion for the policy statement. This statement is a logical expression string composed of logical operators (keywords AND, OR, NOT), community names delimited by square brackets [], and parentheses () to group subexpressions. If the expression contains special characters (for example, #, \$, spaces), the entire string must be enclosed in double quotes.</p> <p>The expression specified must already be defined using the configure policy-options community expression expr command.</p> <p>The following are examples of valid logical expressions:</p> <p>"[community_list_A] OR ([community_list_B] AND [community_list_C])"</p>

	"NOT [community_list_A]"
	"[community_list_A] AND [community_list_B] OR [community_list_C]"
	"NOT ([community_list_A] OR [community_list_B] OR [community_list_C])"
String length	1 to 900
Notes	The following elements are part of a choice: expression or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from community name (<i>param-midstring-64</i> <i>string</i>)
Tree	name
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix) 'name' must not contain square brackets []
Notes	The following elements are part of a choice: expression or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from distinguisher number
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	SR policy endpoint address as a match criterion
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Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from evpn-type <i>keyword</i>
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-community-set *reference*

Synopsis	Extended community set as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from extended-community-set <i>reference</i>
Tree	extended-community-set
Description	<p>This command filters matched routes based on the route target extended communities they carry or do not carry.</p> <p>The referenced extended community set is a route policy construct that holds a list of exact match route target extended communities (any mix of type 0, type 1 and type 2).</p>
Reference	configure policy-options extended-community-set <i>policy-community-name</i>
Introduced	25.10.R3
Platforms	7705 SAR Gen 2

extended-community-set-options *keyword*

Synopsis	Extended community set options as a match criterion
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Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from extended-community-set-options <i>keyword</i>
Tree	extended-community-set-options
Description	<p>This command is used in combination with the referenced extended community set to filter matched routes based on the route target extended communities they carry or do not carry.</p> <p>The referenced extended community set is a route policy construct that holds a list of exact match route target extended communities (any mix of type 0, type 1 and type 2).</p>
Options	<p>any – Matches if route has any of the listed route targets</p> <p>all – Matches if route has all of the listed route targets</p> <p>invert – Matches if route has none of the listed route targets</p>
Default	any
Introduced	25.10.R3
Platforms	7705 SAR Gen 2

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from external <i>boolean</i>
Tree	external
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family *keyword*

Synopsis	Address family as the match condition
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from family <i>keyword</i>
Tree	family
Description	This command specifies address families as matching conditions.
Options	<p>ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6</p>
Max. instances	20

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

group-address (*param-midstring* | *string*)

Synopsis Prefix list of multicast group addresses for mathcing

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [from](#) [group-address](#) (*param-midstring* | *string*)

Tree [group-address](#)

String length 1 to 32

String format 'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

host-ip (*param-midstring* | *string*)

Synopsis Prefix list of IGMP host IP addresses for matching

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [from](#) [host-ip](#) (*param-midstring* | *string*)

Tree [host-ip](#)

String length 1 to 32

String format 'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis Interface name as match criterion

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [from](#) [interface](#) (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Tree [interface](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Max. instances 1

Notes This element is ordered by the user.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-subnets

Synopsis	Enter the interface-subnets context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from interface-subnets
Tree	interface-subnets
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> • export, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • route-table-import, when used with BGP • vrf-export, when used with MP-BGP
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-int-name *interface-name*

Synopsis	Interface name as the match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from interface-subnets ip-int-name <i>interface-name</i>
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String length	1 to 32
Max. instances	10
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service string

Synopsis	Service ID of the interface subnets
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from interface-subnets service <i>string</i>
Tree	service
Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level number

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from level <i>number</i>
Tree	level
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference

Synopsis	Enter the local-preference context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from local-preference
Tree	local-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier keyword

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from local-preference qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower

Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from local-preference value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from metric
Tree	metric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from metric qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	Local preference value or variable name
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from metric value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from neighbor
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from neighbor ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	ip-address
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from neighbor prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop

Synopsis	Enter the next-hop context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from next-hop
Tree	next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the next hop to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from next-hop prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list

String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin keyword

Synopsis	Route origin match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from origin <i>keyword</i>
Tree	origin
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the sub-mgmt option for the protocol command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the direct option for the protocol command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the direct option for the protocol command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the managed option for the protocol command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation-state keyword

Synopsis	Origin validation state used for match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from origin-validation-state <i>keyword</i>

Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from ospf-type <i>number</i>
Tree	ospf-type
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-type *keyword*

Synopsis	Path type as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from path-type <i>keyword</i>
Tree	path-type
Options	ibgp, ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from policy (<i>string</i> <i>string</i>)
Tree	policy
String length	1 to 255
String format	'expression' must contain [(policy expression)
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

policy-variables

Synopsis Enter the **policy-variables** context

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [from](#) [policy-variables](#)

Tree [policy-variables](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

name [[variable-name](#)] *policy-var-name*

Synopsis Enter the **name** list instance

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [from](#) [policy-variables](#) [name](#) *policy-var-name*

Tree [name](#)

Max.
instances 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[variable-name] *policy-var-name*

Synopsis Global variable name used to reference policy functions

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [entry](#) *number* [from](#) [policy-variables](#) [name](#) *policy-var-name*

Tree [name](#)

String length 1 to 32

String format 'policy-var-name' must start and end with @ (e.g. @name@)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

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

Synopsis	IP address of the policy variable
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from policy-variables <i>name</i> <i>policy-var-name</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from policy-variables <i>name</i> <i>policy-var-name</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from policy-variables <i>name</i> <i>policy-var-name</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *named-item*

Synopsis	Policy variable value
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from policy-variables <i>name</i> policy-var-name value <i>named-item</i>
Tree	value
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list (<i>param-midstring-64</i> <i>string</i>)
Tree	prefix-list
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list-override [[prefix-list](#)] *string*

Synopsis	Enter the prefix-list-override list instance
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list-override <i>string</i>
Tree	prefix-list-override
Description	Commands in this context convert a prefix list to a specific match type. The routing policy uses the converted list as a match condition.

The prefix list to be converted can be specified by its name, as an expression containing the name of a global variable that holds the name of the prefix list, or as an expression containing the name of a subroutine variable that holds the name of the prefix list.

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-list] *string*

Synopsis	Prefix list to be converted
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list-override <i>string</i>
Tree	prefix-list-override
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-length *number*

Synopsis	Prefix range end length
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list-override <i>string</i> end-length <i>number</i>
Tree	end-length
Range	0 to 128
Notes	The following elements are part of a choice: (end-length and start-length) or through-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-length *number*

Synopsis	Prefix range start length
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list-override <i>string</i> start-length <i>number</i>
Tree	start-length
Range	0 to 128

Notes	The following elements are part of a choice: (end-length and start-length) or through-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

through-length *number*

Synopsis	Prefix through length
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list-override <i>string</i> through-length <i>number</i>
Tree	through-length
Range	0 to 128
Notes	The following elements are part of a choice: (end-length and start-length) or through-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	New match type for entries in referenced prefix list
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from prefix-list-override <i>string</i> type <i>keyword</i>
Tree	type
Options	exact, longer, through, range
Default	exact
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

instance (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Description	<p>This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion.</p> <p>When this command is explicitly configured, the name command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).</p>
Range	0 to 127
Options	all
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from protocol name <i>keyword</i>
Tree	name
Description	<p>This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set:</p> <ul style="list-style-type: none">• direct• static• isis• aggregate• bgp• bgp-label• direct-interface <p>If multiple protocols are specified, the instance command cannot be explicitly configured.</p> <p>The protocol direct-interface route type matches the specific direct interface host IPv4 / 32 and IPv6 /128 routes.</p>

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video, evpn-ifl-host
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-distinguisher-list (*param-midstring-64* | *string*)

Synopsis	Route distinguisher list as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from route-distinguisher-list (<i>param-midstring-64</i> <i>string</i>)
Tree	route-distinguisher-list
Description	<p>This command specifies the (possibly parameterized) name of a route distinguisher (RD) list.</p> <p>This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list.</p> <p>BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.</p>
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from source-address
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from source-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from source-address prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state *keyword*

Synopsis	State used as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from state <i>keyword</i>
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby, fsg-active-path-restoration
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tag (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> from tag (<i>number</i> <i>keyword</i>)
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to

Synopsis	Enable the to context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to
Tree	to
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to level <i>number</i>
Tree	level
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to neighbor
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to neighbor ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone ipv4-address-with-zone ipv6-address-with-zone</i>)
Tree	ip-address
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring | string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to neighbor prefix-list (<i>param-midstring string</i>)
Tree	prefix-list
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring-64 | string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to prefix-list (<i>param-midstring-64 string</i>)
Tree	prefix-list
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28

Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to protocol
Tree	protocol
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Range	0 to 127
Options	all
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Protocol name to match
Context	configure policy-options policy-statement <i>named-item-64</i> entry <i>number</i> to protocol name <i>keyword</i>
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ifl
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry-type *keyword*

Synopsis	The entry type for a route policy entry
Context	configure policy-options policy-statement <i>named-item-64</i> entry-type <i>keyword</i>
Tree	entry-type
Options	numbered, named
Default	numbered
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

named-entry [[entry-name](#)] *named-item-255*

Synopsis	Enter the named-entry list instance
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i>
Tree	named-entry
Max. instances	16384
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-name] *named-item-255*

Synopsis	Route policy entry name
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i>
Tree	named-entry
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enable the action context
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	all, multipaths
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action aigp-metric
Tree	aigp-metric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action as-path
Tree	as-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action as-path add (<i>param-midstring</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: add or replace .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action as-path replace (<i>param-midstring</i> <i>string</i>)
Tree	replace
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: add or replace .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path-prepend

Synopsis	Enter the as-path-prepend context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action as-path-prepend
Tree	as-path-prepend
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path (*number* | *string* | *keyword*)

Synopsis	AS number to prepend to the AS path attribute
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	1 to 4294967295
Options	most-recent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	1 to 50
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6 <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p> <p>When configured to false, no routes are tagged for faster route table updates.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-med
Tree	bgp-med
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-med adjust <i>string</i>
Tree	adjust
String length	1 to 64
String format	'expression' must contain <code>_igp_</code> or <code>_med_</code> or <code>@parameter@</code> 'expression' must contain one operator: <code>+</code> , <code>-</code> or <code>*</code>
Notes	The following elements are part of a choice: adjust or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-med set (<i>keyword number string</i>)
Tree	set
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to false, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the prefer-aigp option is set to false the prefer-aigp option is set to true but the BGP-LU route does not have an AIGP attribute
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action community
Tree	community
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

replace (*param-midstring-64* | *string*)

Synopsis List of community names to replace

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action](#) [community](#) [replace](#) (*param-midstring-64* | *string*)

Tree [replace](#)

String length 1 to 64

String format 'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)

Max. instances 28

Notes The following elements are part of a choice: (**add** and **remove**) or **replace**.
 This element is ordered by the user.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

create-mpls-tunnel *boolean*

Synopsis Create an MPLS tunnel

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action](#) [create-mpls-tunnel](#) *boolean*

Tree [create-mpls-tunnel](#)

Description When configured to **true**, the router creates an MPLS tunnel.
 This command is supported for only the following address families:

- evpn
- ipv4
- ipv6
- label-ipv4
- label-ipv6
- vpn-ipv4
- vpn-ipv6

Default false

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Options	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	<p>This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.</p> <p>Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.</p> <p>This command is not supported for multicast address families.</p>
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	128 to 255

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

install-backup-path *boolean*

Synopsis Install a preprogrammed backup path for the prefix
 Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action](#) **install-backup-path** *boolean*
 Tree [install-backup-path](#)
 Default false
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

local-preference (*number* | *string*)

Synopsis BGP local preference for routes not matching any entry
 Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action](#) **local-preference** (*number* | *string*)
 Tree [local-preference](#)
 String length 1 to 32
 String format 'param-name' must start and end with @ (e.g. @name@)
 Range 0 to 4294967295
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

metric

Synopsis Enter the **metric** context
 Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action](#) **metric**
 Tree [metric](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action metric add (<i>number</i> <i>string</i>)
Tree	add
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set (*number* | *string*)

Synopsis	Metric to assign
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action metric set (<i>number</i> <i>string</i>)
Tree	set
String length	1 to 32
String format	'set' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action metric subtract (<i>number</i> <i>string</i>)
Tree	subtract
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295

Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String length	1 to 32
String format	'next-hop' must start and end with @ (e.g. @name@)
Options	peer-address, self
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String length	1 to 32
String format	'origin' must start and end with @ (e.g. @name@)
Options	igp, egp, incomplete
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state
String length	1 to 32
String format	'origin-validation-state' must start and end with @ (e.g. @name@)

Options	valid, not-found, invalid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference (*number* | *string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action preference (<i>number</i> <i>string</i>)
Tree	preference
String length	1 to 32
String format	'preference' must start and end with @ (e.g. @name@)
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action sr-label-index value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

tag (*number* | *string*)

Synopsis OSPF RIP or IS-IS tag applied to routes
Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action tag](#) (*number* | *string*)
Tree [tag](#)
String length 1 to 32
String format 'tag' must start and end with @ (e.g. @name@)
Range 1 to 4294967295
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

type (*number* | *string*)

Synopsis OSPF metric type applied to routes
Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[action type](#) (*number* | *string*)
Tree [type](#)
String length 1 to 32
String format 'type' must start and end with @ (e.g. @name@)
Range 1 to 2
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

conditional-expression

Synopsis Enable the **conditional-expression** context
Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[conditional-expression](#)
Tree [conditional-expression](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

route-exists *string*

Synopsis	Conditional expression to test route existence
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> conditional-expression route-exists <i>string</i>
Tree	route-exists
String length	1 to 255
String format	'route-exists' must have prefix in [] and optional all or none (e.g. [10.0.0.0/8] all)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

from

Synopsis	Enable the from context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from
Tree	from
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from aggregate-contributor <i>boolean</i>

Tree	aggregate-contributor
Description	<p>When configured to true, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, vrf-export policy or vrf-import policy, no routes are matched by that entry.</p> <p>When configured to false, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area ipv4-address

Synopsis	OSPF area as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from area <i>ipv4-address</i>
Tree	area
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from as-path
Tree	as-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group (param-midstring | string)

Synopsis	AS path group as a match criterion
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from as-path group (<i>param-midstring</i> <i>string</i>)
Tree	group
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: group or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length

Synopsis	Enter the length context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from as-path length
Tree	length
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from as-path length qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from as-path length unique <i>boolean</i>
Tree	unique
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from as-path length value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from as-path name (<i>param-midstring</i> <i>string</i>)
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end", "@variable@end", or "start@variable@".
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: group or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster-id

Synopsis	Enter the cluster-id context
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from cluster-id
Tree	cluster-id

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

ip-address *ipv4-prefix-with-host-bits*

Synopsis Cluster list attribute IP addresses for route matching

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[from cluster-id](#) [ip-address](#) *ipv4-prefix-with-host-bits*

Tree [ip-address](#)

String format 'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32

Max. instances 5

Notes The following elements are part of a choice: **ip-address** or **none-cluster-list**.
 This element is ordered by the user.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

none-cluster-list *boolean*

Synopsis Specify matching BGP routes without a cluster ID

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[from cluster-id](#) [none-cluster-list](#) *boolean*

Tree [none-cluster-list](#)

Default false

Notes The following elements are part of a choice: **ip-address** or **none-cluster-list**.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

color *number*

Synopsis Color ID as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *named-item-64* [named-entry](#) *named-item-255*
[from color](#) *number*

Tree [color](#)

Description This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.

Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from community
Tree	community
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count

Synopsis	Enter the count context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from community count
Tree	count
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier keyword

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from community count qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Community count to match the community count criteria
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from community count type <i>keyword</i>
Tree	type
Options	standard, extended, large
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	Number of BGP communities to match the BGP route
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from community count value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expression *string*

Synopsis	Community expression statement as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from community expression <i>string</i>
Tree	expression
Description	<p>This command configures a community expression statement as a match criterion for the policy statement. This statement is a logical expression string composed of logical operators (keywords AND, OR, NOT), community names delimited by square brackets [], and parentheses () to group subexpressions. If the expression contains special characters (for example, #, \$, spaces), the entire string must be enclosed in double quotes.</p> <p>The expression specified must already be defined using the configure policy-options community expression expr command.</p> <p>The following are examples of valid logical expressions:</p> <pre>"[community_list_A] OR ([community_list_B] AND [community_list_C])"</pre> <pre>"NOT [community_list_A]"</pre> <pre>"[community_list_A] AND [community_list_B] OR [community_list_C]"</pre> <pre>"NOT ([community_list_A] OR [community_list_B] OR [community_list_C])"</pre>

String length	1 to 900
Notes	The following elements are part of a choice: expression or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from community name (<i>param-midstring-64</i> <i>string</i>)
Tree	name
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix) 'name' must not contain square brackets []
Notes	The following elements are part of a choice: expression or name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from distinguisher number
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	SR policy endpoint address as a match criterion
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint

Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from evpn-type <i>keyword</i>
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-community-set *reference*

Synopsis	Extended community set as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from extended-community-set <i>reference</i>
Tree	extended-community-set
Description	This command filters matched routes based on the route target extended communities they carry or do not carry. The referenced extended community set is a route policy construct that holds a list of exact match route target extended communities (any mix of type 0, type 1 and type 2).
Reference	configure policy-options extended-community-set <i>policy-community-name</i>
Introduced	25.10.R3
Platforms	7705 SAR Gen 2

extended-community-set-options *keyword*

Synopsis	Extended community set options as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from extended-community-set-options <i>keyword</i>
Tree	extended-community-set-options

Description	<p>This command is used in combination with the referenced extended community set to filter matched routes based on the route target extended communities they carry or do not carry.</p> <p>The referenced extended community set is a route policy construct that holds a list of exact match route target extended communities (any mix of type 0, type 1 and type 2).</p>
Options	<p>any – Matches if route has any of the listed route targets</p> <p>all – Matches if route has all of the listed route targets</p> <p>invert – Matches if route has none of the listed route targets</p>
Default	any
Introduced	25.10.R3
Platforms	7705 SAR Gen 2

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from external boolean
Tree	external
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family *keyword*

Synopsis	Address family as the match condition
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from family keyword
Tree	family
Description	This command specifies address families as matching conditions.
Options	<p>ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6</p>
Max. instances	20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from group-address (<i>param-midstring</i> <i>string</i>)
Tree	group-address
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-ip (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from host-ip (<i>param-midstring</i> <i>string</i>)
Tree	host-ip
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from interface (<i>named-item</i> <i>interface-name</i> <i>interface-name</i> <i>interface-name</i>)
Tree	interface
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Max. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-subnets

Synopsis	Enter the interface-subnets context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from interface-subnets
Tree	interface-subnets
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> • export, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • route-table-import, when used with BGP • vrf-export, when used with MP-BGP
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-int-name *interface-name*

Synopsis	Interface name as the match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from interface-subnets ip-int-name <i>interface-name</i>
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String length	1 to 32
Max. instances	10
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service *string*

Synopsis	Service ID of the interface subnets
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from interface-subnets service <i>string</i>

Tree	service
Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from level <i>number</i>
Tree	level
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference

Synopsis	Enter the local-preference context
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from local-preference
Tree	local-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement named-item-64 named-entry named-item-255 from local-preference qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from local-preference value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from metric
Tree	metric
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from metric qualifier <i>keyword</i>
Tree	qualifier
Options	equal, or-higher, or-lower
Default	equal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value (*number* | *string*)

Synopsis	Local preference value or variable name
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from metric value (<i>number</i> <i>string</i>)
Tree	value
String length	1 to 32
String format	'param-name' must start and end with @ (e.g. @name@)
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from neighbor
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from neighbor ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	ip-address
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
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Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from neighbor prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop

Synopsis	Enter the next-hop context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from next-hop
Tree	next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the next hop to match
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from next-hop prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)

Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin keyword

Synopsis	Route origin match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from origin <i>keyword</i>
Tree	origin
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the sub-mgmt option for the protocol command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the direct option for the protocol command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the direct option for the protocol command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the managed option for the protocol command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egg, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation-state keyword

Synopsis	Origin validation state used for match criteria
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from origin-validation-state <i>keyword</i>
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.

Options	valid, not-found, invalid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from ospf-type <i>number</i>
Tree	ospf-type
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-type *keyword*

Synopsis	Path type as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from path-type <i>keyword</i>
Tree	path-type
Options	ibgp, ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy (<i>string</i> <i>string</i>)
Tree	policy
String length	1 to 255
String format	'expression' must contain [(policy expression)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-variables

Synopsis	Enter the policy-variables context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables
Tree	policy-variables
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name [[variable-name](#)] *policy-var-name*

Synopsis	Enter the name list instance
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables name <i>policy-var-name</i>
Tree	name
Description	Commands in this context configure global variables for use across BGP peers of a common type (transit, peer, customer, and so on).
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[variable-name\]](#) *policy-var-name*

Synopsis	Global variable name used to reference policy functions
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables name <i>policy-var-name</i>
Tree	name
String length	1 to 32
String format	'policy-var-name' must start and end with @ (e.g. @name@)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the policy variable
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables <i>name</i> <i>policy-var-name</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables <i>name</i> <i>policy-var-name</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables <i>name</i> <i>policy-var-name</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *named-item*

Synopsis	Policy variable value
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from policy-variables <i>name</i> <i>policy-var-name</i> value <i>named-item</i>
Tree	value
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: address , decimal , number , prefix , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list (<i>param-midstring-64</i> <i>string</i>)
Tree	prefix-list
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list-override [[prefix-list](#)] *string*

Synopsis	Enter the prefix-list-override list instance
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list-override <i>string</i>
Tree	prefix-list-override
Description	Commands in this context convert a prefix list to a specific match type. The routing policy uses the converted list as a match condition.

The prefix list to be converted can be specified by its name, as an expression containing the name of a global variable that holds the name of the prefix list, or as an expression containing the name of a subroutine variable that holds the name of the prefix list.

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-list] *string*

Synopsis	Prefix list to be converted
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list-override <i>string</i>
Tree	prefix-list-override
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-length *number*

Synopsis	Prefix range end length
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list-override <i>string</i> end-length <i>number</i>
Tree	end-length
Range	0 to 128
Notes	The following elements are part of a choice: (end-length and start-length) or through-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-length *number*

Synopsis	Prefix range start length
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list-override <i>string</i> start-length <i>number</i>
Tree	start-length
Range	0 to 128

Notes	The following elements are part of a choice: (end-length and start-length) or through-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

through-length *number*

Synopsis	Prefix through length
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list-override <i>string</i> through-length <i>number</i>
Tree	through-length
Range	0 to 128
Notes	The following elements are part of a choice: (end-length and start-length) or through-length .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	New match type for entries in referenced prefix list
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from prefix-list-override <i>string</i> type <i>keyword</i>
Tree	type
Options	exact, longer, through, range
Default	exact
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the name command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from protocol name <i>keyword</i>
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none"> • direct • static • isis • aggregate • bgp • bgp-label • direct-interface <p>If multiple protocols are specified, the instance command cannot be explicitly configured.</p>

	The protocol direct-interface route type matches the specific direct interface host IPv4 / 32 and IPv6 /128 routes.
Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video, evpn-ifl-host
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-distinguisher-list (*param-midstring-64* | *string*)

Synopsis	Route distinguisher list as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from route-distinguisher-list (<i>param-midstring-64</i> <i>string</i>)
Tree	route-distinguisher-list
Description	<p>This command specifies the (possibly parameterized) name of a route distinguisher (RD) list.</p> <p>This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list.</p> <p>BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.</p>
String length	1 to 64
String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from source-address
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source IP address to match
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from source-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from source-address prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String length	1 to 32
String format	'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

state keyword

Synopsis	State used as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from state <i>keyword</i>
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby, fsg-active-path-restoration
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tag (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> from tag (<i>number</i> <i>keyword</i>)
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to

Synopsis	Enable the to context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> to
Tree	to
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> to level <i>number</i>
Tree	level
Range	1 to 2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> to neighbor
Tree	neighbor

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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

Synopsis IP address to match the neighbor

Context **configure** [policy-options](#) [policy-statement](#) [named-item-64](#) [named-entry](#) [named-item-255](#) [to neighbor ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree [ip-address](#)

String format 'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id
 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

prefix-list (*param-midstring* | *string*)

Synopsis Name to match the neighbor prefix list

Context **configure** [policy-options](#) [policy-statement](#) [named-item-64](#) [named-entry](#) [named-item-255](#) [to neighbor prefix-list](#) (*param-midstring* | *string*)

Tree [prefix-list](#)

String length 1 to 32

String format 'param-midstring' must contain @param@ somewhere (e.g. prefix@name@suffix)

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

prefix-list (*param-midstring-64* | *string*)

Synopsis Prefix list as match criterion

Context **configure** [policy-options](#) [policy-statement](#) [named-item-64](#) [named-entry](#) [named-item-255](#) [to prefix-list](#) (*param-midstring-64* | *string*)

Tree [prefix-list](#)

String length 1 to 64

String format	'param-midstring-64' must contain @param@ somewhere (e.g. prefix@name@suffix)
Max. instances	28
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> to protocol
Tree	protocol
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> to protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Range	0 to 127
Options	all
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Protocol name to match
Context	configure policy-options policy-statement <i>named-item-64</i> named-entry <i>named-item-255</i> to protocol name <i>keyword</i>
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ipl

Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list [**name**] *named-item-64*

Synopsis	Enter the prefix-list list instance
Context	configure policy-options prefix-list <i>named-item-64</i>
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item-64*

Synopsis	Prefix list name
Context	configure policy-options prefix-list <i>named-item-64</i>
Tree	prefix-list
Description	This command specifies the name for a prefix list. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **type** *keyword*

Synopsis	Enter the prefix list instance
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i>
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix associated with the prefix length
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Prefix list match type
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword
Tree	prefix
Options	exact, longer, through, range, to, address-mask
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-length *number*

Synopsis	Prefix range end length
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword end-length <i>number</i>
Tree	end-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask-pattern [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for mask-pattern
----------	--

Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword mask-pattern (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	mask-pattern
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Address mask for matching routes to the prefix entry
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword mask-pattern (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	mask-pattern
Description	<p>This command specifies the address mask to compare against the prefix entry to determine whether the route is considered a match.</p> <p>A route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> • The bitwise logical AND of the prefix address and its mask matches the bitwise logical AND of the route address and its mask. • The prefix length of the prefix entry matches the prefix length of the route. <p>For example, for a prefix entry of 17.1.0.0/32, routes with an address 17.1.x.0 (where x can be 0 through 255) and a prefix length of 32 match the entry.</p>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-length *number*

Synopsis	Start in the prefix range length
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword start-length <i>number</i>
Tree	start-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

through-length *number*

Synopsis	Prefix through length
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword through-length <i>number</i>
Tree	through-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for to-prefix
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword to-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	to-prefix
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for "to" match type
Context	configure policy-options prefix-list <i>named-item-64</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type keyword to-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	to-prefix
Description	<p>This command configures an IP prefix to use in a route policy prefix list for the to match type. If the prefix entry is in the format <i>prefix1/length1</i>, and this command is configured in the format <i>prefix2/length2</i>, a route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> • The route shares the same most-significant bits (specified by <i>length1</i>) with the prefix entry • The route shares the same most-significant bits (specified by <i>length2</i>) with this IP prefix value • The prefix length of the route is in the range of <i>length1</i> to <i>length2</i> (inclusive)

For example, for a prefix entry of 10.0.0.8 with a to IP prefix value of 10.0.0.0/32, routes 10.0.0.0/8, 10.0.0.0/9, 10.0.0.0/10, and so on, to 10.0.0.0/32 are considered matches for the prefix entry.

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route-distinguisher-list [[name](#)] *named-item-64*

Synopsis Enter the **route-distinguisher-list** list instance

Context **configure** [policy-options](#) [route-distinguisher-list](#) *named-item-64*

Tree [route-distinguisher-list](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item-64*

Synopsis Route distinguisher list name

Context **configure** [policy-options](#) [route-distinguisher-list](#) *named-item-64*

Tree [route-distinguisher-list](#)

Description This command creates a list of entries used to match the RD in BGP routes of specific address families.

String length 1 to 64

String format 'string-not-all-spaces' must contain at least one non-space character
'name' must not contain @ (use @param@ in policy expressions)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rd-entry [[rd](#)] *string*

Synopsis Add a list entry for **rd-entry**

Context **configure** [policy-options](#) [route-distinguisher-list](#) *named-item-64* [rd-entry](#) *string*

Tree [rd-entry](#)

Max.
instances 128

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[rd] *string*

Synopsis	Route distinguisher
Context	configure policy-options route-distinguisher-list <i>named-item-64</i> rd-entry <i>string</i>
Tree	rd-entry
Description	<p>This command creates an RD matching entry containing an IPv4 address or ASN and the assigned number. The following formats are supported:</p> <ul style="list-style-type: none">• <i>a.b.c.d/m:*</i> – RD in IPv4 format with a wildcard character (such as 10.0.0.0/16:*)• <i>a.b.c.d/m:n</i> – RD in IPv4 format with a specific number (such as 10.0.0.2/32:535)• <i>asn:*</i> – RD in ASN format with a wildcard character (such as 65000:*)• <i>asn:n</i> – RD in ASN format with a specific number (such as 65000:535) <p>See the "Route distinguishers" section of the <i>7705 SAR Gen 2 Layer 3 Services Guide: IES and VPRN</i> for information about Type values.</p>
String length	3 to 28
String format	'rd' must be ip/mask:num, asn:num or 4byte-asn:num (e.g. 10.0.0.0/8:100 or 65535:0)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.19 port commands

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configure
- port port
- access
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - pool named-item
    - apply-groups reference
    - apply-groups-exclude reference
- ingress
  - pool named-item
    - apply-groups reference
    - apply-groups-exclude reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- connector
  - apply-groups reference
  - apply-groups-exclude reference
  - breakout keyword
  - rs-fec-mode keyword
- ddm-events boolean
- description very-long-description
- dist-cpu-protection
  - policy reference
- dwdm
  - apply-groups reference
  - apply-groups-exclude reference
  - coherent
    - apply-groups reference
    - apply-groups-exclude reference
    - compatibility keyword
    - cpr-window-size number
    - dispersion number
    - mode keyword
    - operational-mode keyword
    - report-alarm
      - cfg boolean
      - hosttx boolean
      - mod boolean
      - modflt boolean
      - netrx boolean
      - nettx boolean
    - rx-los-reaction keyword
    - rx-los-thresh decimal-number
    - sweep
      - end number
      - start number
    - target-power decimal-number
  - frequency number
- ethernet
  - access
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth number
    - booking-factor number
  - egress
    - queue-group reference instance-id number
      - accounting-policy reference

```

configure port ethernet access egress queue-group apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **collect-stats** *boolean*
- **description** *description*
- **queue-overrides**
 - **queue** *reference*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **scheduler-policy**
 - **overrides**
 - **scheduler** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **policy-name** *reference*
- **ingress**
 - **queue-group** *reference*
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **description** *description*
 - **queue-overrides**
 - **queue** *reference*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **scheduler-policy**
 - **overrides**
 - **scheduler** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure port ethernet access ingress queue-group scheduler-policy overrides scheduler parent

```

    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- autonegotiate keyword
- collect-stats boolean
- crc-monitor
  - signal-degrade
    - multiplier number
    - threshold number
  - signal-failure
    - multiplier number
    - threshold number
  - window-size number
- dampening
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - half-life number
  - max-suppress-time number
  - reuse-threshold number
  - suppress-threshold number
- discard-rx-pause-frames boolean
- dot1q-etype etype
- dot1x
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - macsec
    - apply-groups reference
    - apply-groups-exclude reference
    - exclude-mac-policy reference
    - exclude-protocol
      - cdp boolean
      - eapol-start boolean
      - efm-oam boolean
      - eth-cfm boolean
      - lacp boolean
      - lldp boolean
      - ptp boolean
      - ubfd boolean
    - rx-must-be-encrypted boolean
  - sub-port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ca-name reference
    - eapol-destination-address mac-address
    - encaps-match
      - all-match boolean
      - double-tag double-vlan-encap
      - single-tag single-vlan-encap
      - untagged boolean
    - max-peers number
- max-authentication-requests number
- per-host-authentication
  - admin-state keyword
  - allowed-source-macs

```

configure port ethernet dot1x per-host-authentication allowed-source-macs mac-address

```

    - mac-address mac-address
    - authenticator-init boolean
  - port-control keyword
  - quiet-period number
  - radius-policy reference
  - radius-server-policy reference
  - radius-server-policy-acct reference
  - radius-server-policy-auth reference
  - re-authentication
    - period number
  - server-timeout number
  - supplicant-timeout number
  - transmit-period number
  - tunnel-dot1q boolean
  - tunnel-qinq boolean
  - tunneling boolean
  - down-on-internal-error
    - tx-laser keyword
  - down-when-looped
    - admin-state keyword
    - keep-alive number
    - retry-timeout number
    - tunneling boolean
    - use-broadcast-address boolean
  - duplex keyword
  - efm-oam
    - accept-remote-loopback boolean
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hold-time number
    - ignore-efm-state boolean
    - mode keyword
    - multiplier number
    - peer-rdi-rx
      - critical-event keyword
      - dying-gasp keyword
      - event-notification keyword
      - link-fault keyword
    - remote-loopback-forward-non-efm-frames boolean
    - transmit-interval number
    - trigger-fault keyword
    - tunneling boolean
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
    - eth-bn-rate-changes boolean
    - port-scheduler-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - max-rate
          - rate (number | keyword)
      - policy-name reference
    - rate number
  - encap-type keyword
  - eth-cfm
    - mep md-admin-name reference ma-admin-name reference mep-id number

```

configure port ethernet eth-cfm mep admin-state

- **admin-state** *keyword*
- **ais**
 - **client-meg-level** *number*
 - **interface-support** *boolean*
 - **interval** *number*
 - **low-priority-defect** *keyword*
 - **priority** *number*
- **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-tlv-ignore** *keyword*
- **description** *description*
- **eth-bn**
 - **receive** *boolean*
 - **rx-update-pacing** *number*
- **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
- **facility-fault** *boolean*
- **low-priority-defect** *keyword*
- **mac-address** *mac-unicast-address-no-zero*
- **one-way-delay-threshold** *number*
- **hold-time**
 - **down** *number*
 - **units** *keyword*
 - **up** *number*
- **ingress**
 - **pre-classifier**
 - **policy-name** *reference*
 - **rate** *number*
- **lACP-tunnel** *boolean*
- **lldp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-mac** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **notification** *boolean*
 - **port-id-subtype** *keyword*
 - **receive** *boolean*
 - **transmit** *boolean*
 - **tunnel-nearest-bridge** *boolean*
 - **tunnel-nearest-customer** *boolean*
 - **tunnel-nearest-non-tpmr** *boolean*
 - **tx-mgmt-address** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tx-tlvs**
 - **port-desc** *boolean*
 - **sys-cap** *boolean*
 - **sys-desc** *boolean*
 - **sys-name** *boolean*
- **load-balancing-algorithm** *keyword*
- **mac-address** *mac-address*
- **min-frame-length** *number*
- **mode** *keyword*
- **mtu** *number*

configure port ethernet network

```

- network
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- egress
  - queue-group reference instance-id number
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - description description
    - policer-control-policy reference
    - queue-overrides
      - queue reference
        - adaptation-rule
          - cir keyword
          - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - drop-tail
          - low
            - percent-reduction-from-mbs (number | keyword)
        - mbs (number | keyword)
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - scheduler-policy
        - policy-name reference
    - queue-policy reference
- ptp-asymmetry number
- ptp-timestamping
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ipv4-address ipv4-address
  - ipv6-address ipv6-address
- ptp-tunnel boolean
- qinq-etype etype
- report-alarm
  - alignment-marker-not-locked boolean
  - block-not-locked boolean
  - duplicate-lane boolean
  - frame-not-locked boolean
  - high-ber boolean
  - local boolean
  - remote boolean
  - signal-fail boolean
- rs-fec-mode keyword
- speed number
- ssm
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - code-type keyword
  - esmc-tunnel boolean
  - tx-dus boolean
  - tx-extended-ql-tlv boolean
- util-stats-interval number
- xgig keyword

```

configure port gnss

- **gnss**
 - **antenna-cable-delay** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **constellation**
 - **galileo** *boolean*
 - **glonass** *boolean*
 - **gps** *boolean*
 - **elevation-mask-angle** *number*
 - **signal-cnr-mask** *number*
- **monitor-oper-group** *reference*
- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **pool** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **oper-group** *reference*
- **otu**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **async-mapping** *boolean*
 - **fec** *keyword*
 - **fine-granularity-ber**
 - **signal-degrade**
 - **clear**
 - **multiplier** *number*
 - **threshold** *number*
 - **raise**
 - **multiplier** *number*
 - **threshold** *number*
 - **signal-failure**
 - **clear**
 - **multiplier** *number*
 - **threshold** *number*
 - **raise**
 - **multiplier** *number*
 - **threshold** *number*
 - **otu2-lan-data-rate** *keyword*
 - **path-monitoring**
 - **trail-trace-identifier**
 - **expected**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
 - **mismatch-reaction** *keyword*
 - **transmit**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
 - **payload-structure-identifier**
 - **payload**
 - **expected** *keyword*
 - **mismatch-reaction** *keyword*
 - **transmit** *keyword*
 - **report-alarm**
 - **fec-fail** *boolean*
 - **fec-sd** *boolean*
 - **fec-sf** *boolean*
 - **fec-uncorr** *boolean*
 - **loc** *boolean*
 - **lof** *boolean*
 - **lom** *boolean*

configure port otu report-alarm los

- **los** *boolean*
- **odu-ais** *boolean*
- **odu-bdi** *boolean*
- **odu-lck** *boolean*
- **odu-oci** *boolean*
- **odu-tim** *boolean*
- **opu-plm** *boolean*
- **otu-ais** *boolean*
- **otu-bdi** *boolean*
- **otu-ber-sd** *boolean*
- **otu-ber-sf** *boolean*
- **otu-biae** *boolean*
- **otu-iae** *boolean*
- **otu-tim** *boolean*
- **sd-threshold** *number*
- **section-monitoring**
 - **trail-trace-identifier**
 - **expected**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
 - **mismatch-reaction** *keyword*
 - **transmit**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
- **sf-sd-method** *keyword*
- **sf-threshold** *number*
- **serial**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rs232**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **channel-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *long-description*
 - **character-length** *number*
 - **control-lead**
 - **input**
 - **dts-dsr** *keyword*
 - **rts-dcd** *keyword*
 - **monitor**
 - **dts-dsr** *keyword*
 - **rts-dcd** *keyword*
 - **output**
 - **cts-alb** *keyword*
 - **dcd-rts** *keyword*
 - **ri-rdl** *keyword*
 - **data-position** *keyword*
 - **hold-time**
 - **down** *number*
 - **up** *number*
 - **loopback** *keyword*
 - **mon-data-inactivity**
 - **clear** *number*
 - **raise** *number*
 - **parity** *keyword*
 - **report-alarm**
 - **ctrl-lead-mon** *boolean*
 - **hcm-oof** *boolean*

configure port serial rs232 report-alarm hcm-rai

```

- hcm-rai boolean
- mon-data-inact boolean
- s-bit-signaling boolean
- socket number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description long-description
  - rx
    - eop
      - idle-timeout number
      - length number
      - special-char string
      - squelch-delay number
      - unsquelch-delay number
    - tx
      - inter-session-delay number
  - speed number
  - stop-bits number
- tdm
  - apply-groups reference
  - apply-groups-exclude reference
  - dsl tdm-dsl-index
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description long-description
    - encap-type keyword
    - idle-payload-fill
      - all-ones
      - pattern number
    - idle-signal-fill
      - all-ones
      - pattern number
    - loopback keyword
    - mode keyword
    - network
      - accounting-policy reference
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
      - queue-policy reference
    - timeslot number
  - clock-source keyword
  - framing keyword
  - hold-time
    - down number
    - up number
  - loopback keyword
  - report-alarm
    - ais boolean
    - los boolean
    - oof boolean
    - rai boolean
  - signal-mode keyword
  - ssm
    - admin-state keyword
    - tx-dus boolean
- e1 tdm-e1-index
  - admin-state keyword

```

configure port tdm e1 apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **channel-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *long-description*
 - **encap-type** *keyword*
 - **idle-payload-fill**
 - **all-ones**
 - **pattern** *number*
 - **idle-signal-fill**
 - **all-ones**
 - **pattern** *number*
 - **loopback** *keyword*
 - **mode** *keyword*
 - **network**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **queue-policy** *reference*
 - **timeslot** *number*
- **clock-source** *keyword*
- **framing** *keyword*
- **hold-time**
 - **down** *number*
 - **up** *number*
- **loopback** *keyword*
- **report-alarm**
 - **ais** *boolean*
 - **los** *boolean*
 - **oof** *boolean*
 - **rai** *boolean*
- **signal-mode** *keyword*
- **ssm**
 - **admin-state** *keyword*
 - **ssm-bit** *number*
 - **tx-dus** *boolean*
- **encoding** *keyword*
- **length** *number*
- **line-impedance** *number*
- **tpif**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **channel-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *long-description*
 - **timeslot** *number*
 - **loopback** *keyword*
 - **report-alarm**
 - **los** *boolean*
 - **rai** *boolean*
- **transceiver**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **digital-coherent-optics** *boolean*
 - **optical-line-system**
 - **egress-amplifier-gain** *decimal-number*

4.19.1 port command descriptions

port [*port-id*] *port*

Synopsis	Enter the port list instance
Context	configure <i>port</i> <i>port</i>
Tree	<i>port</i>
Description	Commands in this context configure ports, multilink bundles, and BPGs. Before a port can be configured, the chassis slot must be provisioned with a valid card type and the MDA must be provisioned with a valid MDA type.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[*port-id*] *port*

Synopsis	Port ID
Context	configure <i>port</i> <i>port</i>
Tree	<i>port</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access

Synopsis	Enter the access context
Context	configure <i>port</i> <i>port</i> access
Tree	access
Description	Commands in this context configure egress and ingress pool policy commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure <i>port</i> <i>port</i> access egress

Tree	egress
Description	Commands in this context specify the configuration of access egress buffer pools to determine how a CBS-reserved space is handled and the strategy for utilizing the shared buffer space.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [[name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure port <i>port</i> access egress pool <i>named-item</i>
Tree	pool
Description	Commands in this context configure pool policies for the pool instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Pool name for the access port
Context	configure port <i>port</i> access egress pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	default
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure port <i>port</i> access ingress
Tree	ingress
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pool [*name*] *named-item*

Synopsis Enter the **pool** list instance

Context **configure** *port* *port* *access* *ingress* *pool* *named-item*

Tree *pool*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis Pool name for the access port

Context **configure** *port* *port* *access* *ingress* *pool* *named-item*

Tree *pool*

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

MD-CLI default default

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the port

Context **configure** *port* *port* *admin-state* *keyword*

Tree *admin-state*

Options enable, disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

connector

Synopsis Enter the **connector** context

Context	configure <i>port</i> <i>port</i> <i>connector</i>
Tree	<i>connector</i>
Description	Commands in this context configure connector ports and modes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

breakout *keyword*



WARNING:

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

Synopsis	Port breakout of the transceiver used in the connector
Context	configure <i>port</i> <i>port</i> <i>connector</i> <i>breakout</i> <i>keyword</i>
Tree	<i>breakout</i>
Description	<p>This command defines the port breakout of the transceiver used in the connector. Specifying the type triggers the creation of the ports that will be accessible under the connector.</p> <p>When a QSFP28 connector uses an SFP+ optical module with the QSFP28-to-SFP+/SFP28 adapter, set this command to c1-10g. This value indicates the presence of the adapter.</p> <p>For some connectors (for example, QSPFDD), there can be overlap in the breakout for different host interfaces. The same port breakout can be supported on an optical modules that uses a host interface of CAUI-4 as another optical module that uses 100GAUI-2. To distinguish from the CAUI-4 host interface, the "-au12" suffix is used on some breakout options. This is only necessary where there is overlap. In other situations, SR OS sets the host interface correctly without requiring the distinction in the breakout option.</p>
Options	c1-40g, c4-10g, c1-100g, c4-25g, c10-10g, c1-400g, c2-100g, c4-100g, c1-10g, c1-25g, c1-50g, c8-50g, c1-800g, c3-100g, c8-100g, c2-400g, c1-400g-flex, c2-400g-flex, c1-1g, c2-1g, c1-100g-au12, c2-100g-au12, c1-400g-au14, c4-100g-au11, c1-100g-au11, c1-400g-au14-flex, c8-10g
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rs-fec-mode *keyword*

Synopsis	RS-FEC mode for the Ethernet connector
Context	configure <i>port</i> <i>port</i> <i>connector</i> <i>rs-fec-mode</i> <i>keyword</i>
Tree	<i>rs-fec-mode</i>

Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet connector. See "Forward Error Correction" in the <i>7705 SAR Gen 2 Interface Configuration Guide</i> for more information about FEC settings.
Options	cl91-514-528, cl91-514-544
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ddm-events *boolean*

Synopsis	Enable Digital Diagnostic Monitoring (DDM) events
Context	configure <i>port</i> <i>port</i> ddm-events <i>boolean</i>
Tree	ddm-events
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure <i>port</i> <i>port</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure <i>port</i> <i>port</i> dist-cpu-protection
Tree	dist-cpu-protection
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	Distributed CPU protection policy name
Context	configure port port dist-cpu-protection policy reference
Tree	policy
Reference	configure system security dist-cpu-protection policy named-item
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dwdm

Synopsis	Enter the dwdm context
Context	configure port port dwdm
Tree	dwdm
Description	Commands in this context configure the Dense Wavelength Division Multiplexing (DWDM) parameters for the port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

coherent

Synopsis	Enter the coherent context
Context	configure port port dwdm coherent
Tree	coherent
Description	Commands in this context configure the coherent optical module.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

compatibility keyword

Synopsis	Optical mode and rate of operation
Context	configure port port dwdm coherent compatibility keyword
Tree	compatibility
Options	long-haul, metro, access, interop, interop2, interop3, long-haul-non-differential, oif-400g-zr, open-zrp-ofec1, open-zrp-ofec2

Default	long-haul
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpr-window-size *number*

Synopsis	Window size for the carrier phase recovery
Context	configure <i>port port</i> <i>dwdm coherent</i> cpr-window-size <i>number</i>
Tree	<i>cpr-window-size</i>
Description	<p>This command configures the window size for the carrier phase recovery.</p> <p>When this command is changed, the link bounces because the receiver needs to be reconfigured.</p>
Range	2 4 8 16 32 64
Units	symbols
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dispersion *number*

Synopsis	Residual chromatic dispersion compensation
Context	configure <i>port port</i> <i>dwdm coherent</i> dispersion <i>number</i>
Tree	<i>dispersion</i>
Description	<p>This command specifies the residual chromatic dispersion compensation when the coherent receiver is operating in manual dispersion control mode.</p>
Range	-50000 to 50000
Units	picoseconds per nanometer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Mode used to compensate for chromatic dispersion
Context	configure <i>port port</i> <i>dwdm coherent</i> mode <i>keyword</i>
Tree	<i>mode</i>
Options	automatic, manual

Default	automatic
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

operational-mode keyword

Synopsis	Coherent optic operational mode
Context	configure port <i>port</i> dwdm coherent operational-mode <i>keyword</i>
Tree	operational-mode
Description	This command is a predefined coherent optical profile where each operational mode indicates a specific combination of host interface, line rate, modulation, FEC, symbol rate, and media standard.
Options	<p>1021 – 4x100GAUI-2, 400G, 16QAM, CFEC, 59.84 Gbd, OIF-ZR</p> <p>1022 – 4x100GAUI-2, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1023 – 4x100GAUI-2, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, Tx shaping</p> <p>1024 – 4x100GAUI-2, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, vendor default CD</p> <p>1025 – 4x100GAUI-2, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, Enh Const.</p> <p>1026 – 4x100GAUI-1, 400G, QPSK, OFEC, 118.20 Gbd, Open ROADM</p> <p>1027 – 4x100GAUI-1, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1028 – 4x100GAUI-2, 400G, QPSK, OFEC, 118.20 Gbd, Open ROADM</p> <p>1029 – 4x100GAUI-2, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1033 – 3x100GAUI-2, 300G, 8QAM, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1034 – 3x100GAUI-2, 300G, 8QAM, OFEC, 60.14 Gbd, Open-ZR+, Tx shaping</p> <p>1035 – 3x100GAUI-2, 300G, 8QAM, OFEC, 60.14 Gbd, Open-ZR+, vendor default CD</p> <p>1037 – 3x100GAUI-2, 300G, 8QAM, OFEC, 60.14 Gbd, Open-ZR+, Enh Const.</p> <p>1043 – 2x100GAUI-2, 200G, QPSK, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1044 – 2x100GAUI-2, 200G, QPSK, OFEC, 60.14 Gbd, Open-ZR+, Tx shaping</p> <p>1045 – 2x100GAUI-2, 200G, QPSK, OFEC, 60.14 Gbd, Open-ZR+, vendor default CD</p> <p>1051 – 2xCAUI4, 200G, QPSK, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1052 – 2xCAUI4, 200G, QPSK, OFEC, 60.14 Gbd, Open-ZR+, Tx shaping</p> <p>1061 – 1xCAUI4, 100G, QPSK, OFEC, 30.07 Gbd, Open-ZR+</p> <p>1062 – 1xCAUI4, 100G, QPSK, OFEC, 30.07 Gbd, Open-ZR+, vendor default CD</p> <p>1065 – 1x100GAUI-2, 100G, QPSK, OFEC, 30.07 Gbd, Open-ZR+</p> <p>1066 – 1x100GAUI-2, 100G, QPSK, OFEC, 30.07 Gbd, Open-ZR+, vendor default CD</p> <p>1068 – 1x100GAUI-2, 100G, DQPSK, SCFEC, 27.95 Gbd, Clause 154, vendor default CD</p> <p>1069 – 1x100GAUI-2, 100G, DQPSK, SCFEC, 27.95 Gbd, Clause 154</p> <p>1081 – 400GAUI-8, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, Enh Const</p> <p>1082 – 400GAUI-8, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, (Small PMD)</p> <p>1083 – 400GAUI-8, 400G, 16QAM, CFEC, 59.84 Gbd, OIF-ZR</p> <p>1085 – 400GAUI-8, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+</p> <p>1086 – 400GAUI-8, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, Tx shaping</p> <p>1087 – 400GAUI-8, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+, vendor default CD</p> <p>1088 – 400GAUI-8, 400G, 16QAM, CFEC, 60.14 Gbd, OIF-ZR, Unamp</p> <p>1089 – 1x400GAUI-4, 400G, QPSK, OFEC, 118.20 Gbd, Open ROADM</p> <p>1090 – 1x400GAUI-4, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+</p>

1091 – 1x400GAUI-4, 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+
 1092 – 1x400GAUI-8; 400G, 16QAM, OFEC, 60.14 Gbd, Open-ZR+
 1162 – 1xCAUI4, 100G, DQPSK, SCFEC, 27.95 Gbd, Clause 154
 1164 – 1xCAUI4, 100G, DQPSK, SCFEC, 27.95 Gbd, OTU4-LR
 1210 – 1x800GAUI-8; 800G, PCS-16QAM, OFEC, 131.34 Gbd, Open ROADM
 1211 – 1x800GAUI-8; 800G, DP-16QAM, OFEC, 118.20 Gbd, OIF
 1220 – 8x100GAUI-1; 800G, PCS-16QAM, OFEC, 131.34 Gbd, Open ROADM
 1221 – 1x800GAUI-8; 800G, DP-16QAM, OFEC, 118.20 Gbd, OIF
 1240 – 2x400GAUI-4; 800G, PCS-16QAM, OFEC, 131.34 Gbd, Open ROADM
 1241 – 2x400GAUI-4; 800G, DP-16QAM, OFEC, 118.20 Gbd, OIF
 2001 – 1x800GAUI-8; 800G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom); Enh Const
 2002 – 8x100GAUI-1; 800G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom); Enh Const
 2003 – 1x400GAUI-4; 400G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom)
 2004 – 1x400GAUI-4; 400G; MPCS; OFEC; 65.7 Gbd, FlexO (Custom)
 2005 – 4x100GAUI-1; 400G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom)
 2006 – 4x100GAUI-1; 400G; MPCS; OFEC; 65.7 Gbd, FlexO (Custom)
 2007 – 2x400GAUI-4; 800G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom); Enh Const
 2008 – 1x400GAUI-8; 400G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom)
 2009 – 1x400GAUI-8; 400G; MPCS; OFEC; 65.7 Gbd, FlexO (Custom)
 2010 – 4x100GAUI-2; 400G; MPCS; OFEC; 113.34 Gbd, FlexO (Custom)
 2011 – 4x100GAUI-2; 400G; MPCS; OFEC; 65.7 Gbd, FlexO (Custom)
 2012 – 1x400GAUI-8; 400G; MPCS; OFEC; 87.4 Gbd, FlexO (Custom)
 2013 – 4x100GAUI-2; 400G; MPCS; OFEC; 87.4 Gbd, FlexO (Custom)
 2014 – 1x400GAUI-8; 400G; 16QAM; OFEC; 60.14 Gbd, Open-ZR+, Enh Const
 2015 – 4x100GAUI-2; 400G; 16QAM; OFEC; 60.14 Gbd, Open-ZR+
 2016 – 1x400GAUI-8; 400G; 16QAM; OFEC; 60.14 Gbd, Open-ZR+
 2017 – 1x400GAUI-8; 400G; 16QAM; LDPC; 64.45 Gbd, FlexO (Custom)
 2018 – 4x100GAUI-2; 400G; 16QAM; LDPC; 64.45 Gbd, FlexO (Custom)
 2019 – 1x400GAUI-8; 400G; 16QAM; LDPC; 71.6 Gbd, FlexO (Custom)
 2020 – 4x100GAUI-2; 400G; 16QAM; LDPC; 71.6 Gbd, FlexO (Custom)

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

report-alarm

Synopsis Enter the **report-alarm** context

Context **configure** **port** *port* **dwdm coherent** **report-alarm**

Tree [report-alarm](#)

Description Commands in this context configure the alarms reported for the coherent module.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cfg boolean

Synopsis	Enable/disable cfg alarm.
Context	configure port port dwdm coherent report-alarm cfg <i>boolean</i>
Tree	cfg
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

hosttx boolean

Synopsis	Report the host (electrical side) transmit alarm
Context	configure port port dwdm coherent report-alarm hosttx <i>boolean</i>
Tree	hosttx
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mod boolean

Synopsis	Report the module alarm
Context	configure port port dwdm coherent report-alarm mod <i>boolean</i>
Tree	mod
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

modflt boolean

Synopsis	Report the module fault alarm
Context	configure port port dwdm coherent report-alarm modflt <i>boolean</i>
Tree	modflt
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netrx boolean

Synopsis	Report the network (optical side) receive alarm
Context	configure port port dwdm coherent report-alarm netrx boolean
Tree	netrx
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nettx boolean

Synopsis	Report the network (optical side) transmit alarm
Context	configure port port dwdm coherent report-alarm nettx boolean
Tree	nettx
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rx-los-reaction keyword

Synopsis	Reaction to an RX LOS
Context	configure port port dwdm coherent rx-los-reaction keyword
Tree	rx-los-reaction
Description	<p>This command configures the reaction to an RX LOS.</p> <p>Note: If this command is disabled for some coherent DWDM transceivers, the transceiver only reports local fault alarms when an RX LOS condition occurs; however, the port returns to service faster after the LOS condition is cleared. For these transceivers, if this command is enabled, there is better visibility of individual alarms (for example, signal-fail, local fault, no-am-lock), but the port takes longer to service after the LOS condition is cleared.</p>
Options	none, squelch
Default	squelch
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rx-los-thresh *decimal-number*

Synopsis	Average input power LOS threshold
Context	configure <i>port port</i> <i>dwdm coherent rx-los-thresh decimal-number</i>
Tree	<i>rx-los-thresh</i>
Range	-30 to -13
Units	decibel-milliwatts
Default	-23
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sweep

Synopsis	Enter the sweep context
Context	configure <i>port port</i> <i>dwdm coherent sweep</i>
Tree	<i>sweep</i>
Description	Commands in this context allow users to configure the dispersion sweep start and end values for the automatic mode of coherent control. If the user knows the approximate or theoretical residual dispersion of the link, these commands can be used to limit the range of sweeping for the automatic control mode and therefore achieve a faster link up.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the dispersion compensation range
Context	configure <i>port port</i> <i>dwdm coherent sweep end number</i>
Tree	<i>end</i>
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the dispersion compensation range
Context	configure <i>port port</i> <i>dwdm coherent sweep start number</i>
Tree	<i>start</i>
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	-25500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

target-power *decimal-number*

Synopsis	Average output power target for the port
Context	configure <i>port port</i> <i>dwdm coherent target-power decimal-number</i>
Tree	<i>target-power</i>
Range	-20 to 3
Units	decibel-milliwatts
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frequency *number*

Synopsis	Center frequency for tunable DWDM optical interface
Context	configure <i>port port</i> <i>dwdm frequency number</i>
Tree	<i>frequency</i>
Description	<p>This command configures the center frequency to use for a tunable DWDM optical interface. This command can be used to specify any frequency in the C band.</p> <p>To set the DWDM frequency, the port must be a physical port and the provisioned MDA type must have DWDM tunable optics (for example, p1-100g-tun-b), or the MDA must support the option of tunable DWDM optic modules.</p> <p>This command replaces the configure port dwdm channel command.</p>
Range	184800000 to 196750000
Units	megahertz

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ethernet

Synopsis	Enter the ethernet context
Context	configure <i>port</i> <i>port</i> ethernet
Tree	ethernet
Description	Commands in this context configure Ethernet port attributes. This context can only be used when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access

Synopsis	Enter the access context
Context	configure <i>port</i> <i>port</i> ethernet access
Tree	access
Description	Commands in this context configure Ethernet access port commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	Administrative bandwidth assigned to Ethernet ports
Context	configure <i>port</i> <i>port</i> ethernet access bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

booking-factor *number*

Synopsis	Booking factor applied to the Ethernet port
Context	configure port <i>port</i> ethernet access booking-factor <i>number</i>
Tree	booking-factor
Range	1 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure port <i>port</i> ethernet access egress
Tree	egress
Description	Commands in this context configure Ethernet access egress port commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group [[queue-group-name](#)] *reference instance-id number*

Synopsis	Enter the queue-group list instance
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference instance-id number</i>
Tree	queue-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-group-name] *reference*

Synopsis	Queue group name
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference instance-id number</i>
Tree	queue-group
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

instance-id *number*

Synopsis	Instance ID for the egress queue group
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Range	1 to 65535
MD-CLI default	1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides
Tree	queue-overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *reference*

Synopsis	Queue ID
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i>

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (number | keyword)

Synopsis	CBS for the template queue
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Context	configure <i>port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference cbs (number keyword)</i>
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure <i>port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference drop-tail</i>
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure <i>port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference drop-tail low</i>
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure <i>port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference drop-tail low percent-reduction-from-mbs (number keyword)</i>

Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference parent
Tree	parent
Description	<p>Commands in this context define the weight of the queue treatment by the parent scheduler that further governs the available bandwidth given to the queue, aside from the queue PIR setting.</p> <p>When multiple schedulers or queues share a child status with the parent scheduler, the weight or level commands define how the queue contends with the other children for the parent bandwidth.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR that overrides the parent for the queue group
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>access</i> <i>egress</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>queue-overrides</i> <i>queue</i> <i>reference</i> <i>parent</i> <i>cir-weight</i> <i>number</i>
Tree	<i>cir-weight</i>
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	PIR that overrides the parent for the queue group
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>access</i> <i>egress</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>queue-overrides</i> <i>queue</i> <i>reference</i> <i>parent</i> <i>weight</i> <i>number</i>
Tree	<i>weight</i>
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>access</i> <i>egress</i> <i>queue-group</i> <i>reference</i> <i>instance-id</i> <i>number</i> <i>queue-overrides</i> <i>queue</i> <i>reference</i> <i>percent-rate</i>
Tree	<i>percent-rate</i>
Description	Commands in this context specify percent rates. These commands are ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the hs-wrr-group command within the egress queue group template.
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR for the queue
Context	configure port <i>port</i> ethernet access egress queue-group reference instance-id <i>number</i> queue-overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR for the queue
Context	configure port <i>port</i> ethernet access egress queue-group reference instance-id <i>number</i> queue-overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure port <i>port</i> ethernet access egress queue-group reference instance-id <i>number</i> queue-overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the queue
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Context	configure <i>port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference rate cir (number keyword)</i>
Tree	<i>cir</i>
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number | keyword*)

Synopsis	PIR for the queue
Context	configure <i>port port ethernet access egress queue-group reference instance-id number queue-overrides queue reference rate pir (number keyword)</i>
Tree	<i>pir</i>
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the egress queue group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [*scheduler-name*] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	<p>Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.</p> <p>A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	configure port <i>port</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight

Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	PIR that overrides the parent
Context	configure port port ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler named-item parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure port port ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler named-item rate
Tree	rate
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure port port ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler named-item rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent

scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure <i>port</i> <i>port</i> <i>ethernet access egress queue-group reference</i> <i>instance-id</i> <i>number</i> <i>scheduler-policy overrides scheduler</i> <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	<i>pir</i>
Description	This command specifies the PIR. When the rate command is executed, a valid PIR setting must be explicitly defined. Any other value results in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure <i>port</i> <i>port</i> <i>ethernet access egress queue-group reference</i> <i>instance-id</i> <i>number</i> <i>scheduler-policy</i> policy-name <i>reference</i>
Tree	<i>policy-name</i>
Reference	configure <i>qos scheduler-policy</i> <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure port port ethernet access ingress
Tree	ingress
Description	Commands in this context configure Ethernet access ingress port commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group [[queue-group-name](#)] *reference*

Synopsis	Enter the queue-group list instance
Context	configure port port ethernet access ingress queue-group <i>reference</i>
Tree	queue-group
Description	<p>Commands in this context create an ingress queue group on the Ethernet port. Queue groups created on access ports are used as an alternative queue destination for SAPs.</p> <p>Queue groups can be created on both access and network oriented ports. When the port is in access mode, the queue groups must be created within the port access node. Access ingress queue groups can only be used by ingress SAP forwarding classes and only a single ingress queue group per port is supported. When the queue group is created in an ingress port context, the queue group name must be an existing ingress queue group template. Two ingress queue groups with the same name cannot be created on the same port.</p> <p>When creating a queue group, the system will attempt to allocate queue resources based on the queues defined in the queue group template. If the appropriate queue resources do not currently exist, the queue group will not be created. Ingress port queue groups do not support shared-queuing or multipoint shared queuing behavior.</p> <p>A port queue group cannot be removed from the port when a forwarding class is currently redirected to the group. All forwarding class redirections must first be removed prior to removing the queue group.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[queue-group-name](#)] *reference*

Synopsis	Queue group name
Context	configure port port ethernet access ingress queue-group <i>reference</i>
Tree	queue-group

Description	This command specifies the queue group name. The specified queue group name must exist as an ingress or egress queue group template depending on the ingress or egress context of the port queue group. Only a single queue group may be created on an ingress port.
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port port ethernet access ingress queue-group <i>reference accounting-policy reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port port ethernet access ingress queue-group <i>reference collect-stats boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure port port ethernet access ingress queue-group <i>reference description description</i>
Tree	description
String length	1 to 80

String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i>
Tree	queue
Description	Commands in this context associate a queue for use in a queue group template. The template queue is created on each queue group object that is created with the queue group template name. Each queue is identified within the template by a queue ID number. The template ensures that all queue groups created with the template's name have the same queue IDs, providing a uniform structure for the forwarding class redirection commands in the SAP egress QoS policies. The queue commands can be individually changed for each queue in each queue group using per queue overrides.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[queue-id](#)] *reference*

Synopsis	Queue ID for the queue group template
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i>

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (number | keyword)

Synopsis	CBS for the template queue
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Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which out-of-profile packets are accepted into the queue and discarded.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs

Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure port port ethernet access ingress queue-group reference queue-overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir

Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure <i>port</i> <i>port</i> <i>ethernet access ingress queue-group reference queue-overrides queue reference rate</i> pir (<i>number</i> <i>keyword</i>)
Tree	<i>pir</i>
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the ingress queue group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides
Tree	overrides
Description	Commands in this context specify the set of attributes specifying values specific to the given queue-group instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	<p>Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.</p> <p>A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight

Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight number

Synopsis	PIR that overrides the parent
Context	configure port port ethernet access ingress queue-group reference scheduler-policy overrides scheduler named-item parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure port port ethernet access ingress queue-group reference scheduler-policy overrides scheduler named-item rate
Tree	rate
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (number | keyword)

Synopsis	CIR for the scheduler
Context	configure port port ethernet access ingress queue-group reference scheduler-policy overrides scheduler named-item rate cir (<i>number keyword</i>)
Tree	cir
Description	This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent

scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command specifies the PIR. When the rate command is executed, a valid PIR setting must be explicitly defined. Any other value results in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure port <i>port</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port port ethernet accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

autonegotiate *keyword*

Synopsis	Speed and duplex autonegotiation on the Ethernet port
Context	configure port port ethernet autonegotiate <i>keyword</i>
Tree	autonegotiate
Description	<p>This command enables speed and duplex autonegotiation on Fast Ethernet ports and enables far-end fault indicator support on Gb ports. When autonegotiation is enabled on a port, the link attempts to automatically negotiate the link speed and duplex commands. If autonegotiation is enabled, the configured duplex and speed commands are ignored.</p> <p>When autonegotiation is disabled on a port, the port does not attempt to autonegotiate and will only operate at the speed and duplex command settings configured for the port. Note that disabling autonegotiation on Gb ports is not allowed as the IEEE 802.3 specification for Gb Ethernet requires autonegotiation be enabled for far end fault indication.</p> <p>It is required for autonegotiation to be limited for ports in a LAG to guarantee a specific port speed.</p>
Options	true, false, limited
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port port ethernet collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

crc-monitor

Synopsis Enter the **crc-monitor** context

Context **configure** *port port* *ethernet* **crc-monitor**

Tree **crc-monitor**

Description Commands in this context configure Ethernet Cyclic Redundancy Check (CRC) monitoring.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

signal-degrade

Synopsis Enter the **signal-degrade** context

Context **configure** *port port* *ethernet* **crc-monitor** **signal-degrade**

Tree **signal-degrade**

Description Commands in this context specify the error rate at which to declare the Signal Degrade (SD) condition on an Ethernet interface. The value represents $M \cdot 10^E \cdot N$, which is the ratio of errored frames over the total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

multiplier *number*

Synopsis SD multiplier

Context **configure** *port port* *ethernet* **crc-monitor** **signal-degrade** **multiplier** *number*

Tree **multiplier**

Range 1 to 9

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

threshold *number*

Synopsis	SD threshold
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>crc-monitor</i> <i>signal-degrade</i> threshold <i>number</i>
Tree	<i>threshold</i>
Range	1 to 9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-failure

Synopsis	Enter the signal-failure context
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>crc-monitor</i> signal-failure
Tree	<i>signal-failure</i>
Description	Commands in this context specify the error rate at which to declare the Signal Fail (SF) condition on an Ethernet interface. The value represents M*10E-N errored frames over total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	SF multiplier
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>crc-monitor</i> <i>signal-failure</i> multiplier <i>number</i>
Tree	<i>multiplier</i>
Range	1 to 9
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	SF threshold
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>crc-monitor</i> <i>signal-failure</i> threshold <i>number</i>
Tree	<i>threshold</i>

Range	1 to 9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	configure port port ethernet crc-monitor window-size <i>number</i>
Tree	window-size
Description	This command specifies the sliding window size over which the Ethernet frames are sampled to detect SF or SD conditions. The command is used jointly with the signal-failure and the signal-degrade commands to configure the sliding window size.
Range	5 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dampening

Synopsis	Enter the dampening context
Context	configure port port ethernet dampening
Tree	dampening
Description	Commands in this context configure Exponential Port Dampening (EPD) for the Ethernet port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of exponential port dampening
Context	configure port port ethernet dampening admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

half-life *number*

Synopsis	Half-life decay time
Context	configure <i>port</i> <i>port</i> <i>ethernet dampening half-life number</i>
Tree	<i>half-life</i>
Description	This command specifies the time that must pass before penalties decay to one-half the initial amount. The half-life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half-life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 2000
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-suppress-time *number*

Synopsis	Maximum suppression time
Context	configure <i>port</i> <i>port</i> <i>ethernet dampening max-suppress-time number</i>
Tree	<i>max-suppress-time</i>
Description	<p>This command specifies the maximum suppression time, which is the time it can take after the physical link comes up before the worst case accumulated penalties have decayed to the reuse threshold. The maximum penalty is derived from the maximum suppression time, half life, and reuse threshold, using the following equation:</p> $\text{maximum penalty} = (\text{reuse threshold})^2 \exp(-(\text{maximum suppression time} / \text{half life}))$ <p>The half life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half life must be less than or equal to 49 and greater than or equal to one.</p>
Range	1 to 43200
Units	seconds
Default	20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reuse-threshold *number*

Synopsis	Threshold which port-up state is no longer suppressed
Context	configure port port ethernet dampening reuse-threshold <i>number</i>
Tree	reuse-threshold
Description	This command specifies the threshold at which the port-up state is no longer suppressed, after the port has been in a suppressed state and the accumulated penalties decay drops below this threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-threshold *number*

Synopsis	Threshold at which the port-up state is suppressed
Context	configure port port ethernet dampening suppress-threshold <i>number</i>
Tree	suppress-threshold
Description	This command specifies the threshold at which the port-up state is suppressed until the accumulated penalties drop below the reuse threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	2000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-rx-pause-frames *boolean*

Synopsis	Discard received pause frames
Context	configure port port ethernet discard-rx-pause-frames <i>boolean</i>
Tree	discard-rx-pause-frames
Description	When configured to true , the router discards the received pause frames, which are used for local link flow control.

	When configured to false , pause frames are processed upon receipt, and the transmit side of the receiving port pauses its transmissions.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1q-etype *etype*

Synopsis	Ethertype expected if port encapsulation type is dot1q
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>dot1q-etype</i> <i>etype</i>
Tree	<i>dot1q-etype</i>
Description	This command specifies the Ethertype expected when the port encapsulation type is dot1q. Dot1q encapsulation is supported only on Ethernet interfaces.
Default	33024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1x

Synopsis	Enter the dot1x context
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>dot1x</i>
Tree	<i>dot1x</i>
Description	Commands in this context configure port-specific 802.1x authentication attributes. 802.1x authentication is supported only when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of dot1x packet extraction to CPM
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>dot1x</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	25.3.R2

Platforms	7705 SAR Gen 2
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macsec

Synopsis	Enter the macsec context
Context	configure port port ethernet dot1x macsec
Tree	macsec
Description	Commands in this context configure Media Access Control Security (MACsec) under the port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-mac-policy *reference*

Synopsis	MAC policy excluded from MACsec encryption
Context	configure port port ethernet dot1x macsec exclude-mac-policy <i>reference</i>
Tree	exclude-mac-policy
Reference	configure macsec mac-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-protocol

Synopsis	Enter the exclude-protocol context
Context	configure port port ethernet dot1x macsec exclude-protocol
Tree	exclude-protocol
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cdp *boolean*

Synopsis	Disable MACsec for all packets on the link for CDP
Context	configure port port ethernet dot1x macsec exclude-protocol cdp <i>boolean</i>
Tree	cdp
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

eapol-start *boolean*

Synopsis Disable MACsec for all packets on the link for EAPOL
Context **configure** *port port ethernet dot1x macsec exclude-protocol eapol-start boolean*
Tree *eapol-start*
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

efm-oam *boolean*

Synopsis Disable MACsec for all packets on the link for EFM-OAM
Context **configure** *port port ethernet dot1x macsec exclude-protocol efm-oam boolean*
Tree *efm-oam*
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

eth-cfm *boolean*

Synopsis Disable MACsec for all packets on the link for ETH-CFM
Context **configure** *port port ethernet dot1x macsec exclude-protocol eth-cfm boolean*
Tree *eth-cfm*
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lACP *boolean*

Synopsis Disable MACsec for all packets on the link for LACP
Context **configure** *port port ethernet dot1x macsec exclude-protocol lacp boolean*
Tree *lacp*

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lldp *boolean*

Synopsis	Disable MACsec for all packets on the link for LLDP
Context	configure port port ethernet dot1x macsec exclude-protocol lldp <i>boolean</i>
Tree	lldp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ptp *boolean*

Synopsis	Disable MACsec for all packets on the link for PTP
Context	configure port port ethernet dot1x macsec exclude-protocol ptp <i>boolean</i>
Tree	ptp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ubfd *boolean*

Synopsis	Disable MACsec for all packets on the link for uBFD
Context	configure port port ethernet dot1x macsec exclude-protocol ubfd <i>boolean</i>
Tree	ubfd
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rx-must-be-encrypted *boolean*

Synopsis	Drop all port traffic that is not MACsec-secured
Context	configure port port ethernet dot1x macsec rx-must-be-encrypted <i>boolean</i>

Tree	rx-must-be-encrypted
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sub-port [[sub-port-id](#)] *number*

Synopsis	Enter the sub-port list instance
Context	configure port port ethernet dot1x macsec sub-port <i>number</i>
Tree	sub-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sub-port-id] *number*

Synopsis	Sub-port ID
Context	configure port port ethernet dot1x macsec sub-port <i>number</i>
Tree	sub-port
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of MACsec on the port
Context	configure port port ethernet dot1x macsec sub-port <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-name *reference*

Synopsis	Connectivity association linked to the MACsec sub-port
Context	configure port port ethernet dot1x macsec sub-port number ca-name <i>reference</i>
Tree	ca-name
Reference	configure macsec connectivity-association <i>string</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eapol-destination-address *mac-address*

Synopsis	EAPOL destination MAC address
Context	configure port port ethernet dot1x macsec sub-port number eapol-destination-address <i>mac-address</i>
Tree	eapol-destination-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encap-match

Synopsis	Enter the encap-match context
Context	configure port port ethernet dot1x macsec sub-port number encap-match
Tree	encap-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-match *boolean*

Synopsis	Match and encrypt all traffic patterns
Context	configure port port ethernet dot1x macsec sub-port number encap-match all-match <i>boolean</i>
Tree	all-match
Default	true
Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

double-tag *double-vlan-encap*

Synopsis QinQ double tag traffic pattern to match

Context **configure** *port port ethernet dot1x macsec sub-port number encap-match double-tag double-vlan-encap*

Tree *double-tag*

String length 1 to 11

String format 'double-vlan-encap' must be inner.outer Q-tag or * form

Notes The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

single-tag *single-vlan-encap*

Synopsis Dot1q single tag traffic pattern to match

Context **configure** *port port ethernet dot1x macsec sub-port number encap-match single-tag single-vlan-encap*

Tree *single-tag*

String length 1 to 11

String format 'single-vlan-encap' must be Q-tag or *

Notes The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

untagged *boolean*

Synopsis Match and encrypt untagged traffic only

Context **configure** *port port ethernet dot1x macsec sub-port number encap-match untagged boolean*

Tree *untagged*

Notes The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-peers *number*

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

Synopsis	Maximum number of peers supported on the port
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>dot1x</i> <i>macsec</i> <i>sub-port</i> <i>number</i> max-peers <i>number</i>
Tree	<i>max-peers</i>
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-authentication-requests *number*

Synopsis	Maximum number of RADIUS retries
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>dot1x</i> max-authentication-requests <i>number</i>
Tree	<i>max-authentication-requests</i>
Range	1 to 10
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

per-host-authentication

Synopsis	Enter the per-host-authentication context
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>dot1x</i> per-host-authentication
Tree	<i>per-host-authentication</i>
Description	Commands in this context configure per-host authentication on the port or VLAN scope. When dot1x authentication is configured, the router authenticates each host based on the source MAC or VLAN. When a host is authenticated via RADIUS policy, its source MAC is allowed through the port, while the port is closed for any other MAC. Any traffic from the allowed host is forwarded on the port, including untagged, and tagged packets.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of per-host authentication
Context	configure port port ethernet dot1x per-host-authentication admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allowed-source-macs

Synopsis	Enter the allowed-source-macs context
Context	configure port port ethernet dot1x per-host-authentication allowed-source-macs
Tree	allowed-source-macs
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address [[mac](#)] *mac-address*

Synopsis	Add a list entry for mac-address
Context	configure port port ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>mac-address</i>
Tree	mac-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[mac](#)] *mac-address*

Synopsis	Source MAC address of a host selected for authentication
Context	configure port port ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

authenticator-init *boolean*

Synopsis Initiate per-host authentication

Context **configure** [port](#) [port](#) [ethernet](#) [dot1x](#) [per-host-authentication](#) **authenticator-init** *boolean*

Tree [authenticator-init](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

port-control *keyword*

Synopsis 802.1x authentication mode

Context **configure** [port](#) [port](#) [ethernet](#) [dot1x](#) **port-control** *keyword*

Tree [port-control](#)

Options force-unauthorized, auto, force-authorized

Default force-authorized

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

quiet-period *number*

Synopsis Time between two sessions when no EAPOL frames are sent

Context **configure** [port](#) [port](#) [ethernet](#) [dot1x](#) **quiet-period** *number*

Tree [quiet-period](#)

Range 1 to 3600

Units seconds

Default 60

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

radius-policy *reference*

Synopsis RADIUS policy used for 802.1x authentication

Context	configure port <i>port</i> ethernet dot1x radius-policy <i>reference</i>
Tree	radius-policy
Reference	configure system security dot1x radius-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius-server-policy *reference*

Synopsis	RADIUS server policy name
Context	configure port <i>port</i> ethernet dot1x radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>named-item</i>
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius-server-policy-acct *reference*

Synopsis	RADIUS server policy name for accounting
Context	configure port <i>port</i> ethernet dot1x radius-server-policy-acct <i>reference</i>
Tree	radius-server-policy-acct
Reference	configure aaa radius server-policy <i>named-item</i>
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius-server-policy-auth *reference*

Synopsis	RADIUS server policy name for authentication
Context	configure port <i>port</i> ethernet dot1x radius-server-policy-auth <i>reference</i>
Tree	radius-server-policy-auth
Reference	configure aaa radius server-policy <i>named-item</i>

Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

re-authentication

Synopsis	Enable the re-authentication context
Context	configure port <i>port</i> ethernet dot1x re-authentication
Tree	re-authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

period *number*

Synopsis	Delay before re-authentication is performed
Context	configure port <i>port</i> ethernet dot1x re-authentication period <i>number</i>
Tree	period
Range	1 to 9000
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-timeout *number*

Synopsis	Wait time for a response from the RADIUS server
Context	configure port <i>port</i> ethernet dot1x server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

supplicant-timeout *number*

Synopsis	Wait time for a response to EAPOL messages
Context	configure <i>port port</i> <i>ethernet dot1x supplicant-timeout number</i>
Tree	<i>supplicant-timeout</i>
Range	1 to 300
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-period *number*

Synopsis	Time after which a new EAPOL request message is sent
Context	configure <i>port port</i> <i>ethernet dot1x transmit-period number</i>
Tree	<i>transmit-period</i>
Range	1 to 3600
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-dot1q *boolean*

Synopsis	Enable dot1x tunneling for 802.1q tagged packets
Context	configure <i>port port</i> <i>ethernet dot1x tunnel-dot1q boolean</i>
Tree	<i>tunnel-dot1q</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-qinq *boolean*

Synopsis	Enable dot1x tunneling for QinQ tagged packets
Context	configure <i>port port</i> <i>ethernet dot1x tunnel-qinq boolean</i>

Tree	tunnel-qinq
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunneling *boolean*

Synopsis	Allow tunneling of untagged 802.1x frames
Context	configure port port ethernet dot1x tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down-on-internal-error

Synopsis	Enable the down-on-internal-error context
Context	configure port port ethernet down-on-internal-error
Tree	down-on-internal-error
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-laser *keyword*

Synopsis	Remote laser state on internal MAC transmit error
Context	configure port port ethernet down-on-internal-error tx-laser <i>keyword</i>
Tree	tx-laser
Options	off, on
Default	on
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down-when-looped

Synopsis	Enter the down-when-looped context
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Context	configure port port ethernet down-when-looped
Tree	down-when-looped
Description	Commands in this context configure Ethernet loop detection.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Ethernet loop detection
Context	configure port port ethernet down-when-looped admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keep-alive *number*

Synopsis	Time interval between keepalive PDUs
Context	configure port port ethernet down-when-looped keep-alive <i>number</i>
Tree	keep-alive
Description	This command configures the time interval between the keepalive PDUs transmitted toward the network during Ethernet loop detection.
Range	1 to 120
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-timeout *number*

Synopsis	Wait time before re-enabling port after loop detection
Context	configure port port ethernet down-when-looped retry-timeout <i>number</i>
Tree	retry-timeout

Description	This command configures the minimum wait time before re-enabling the Ethernet port after it is brought down because of a loop detection.
Range	0 10 to 160
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunneling *boolean*

Synopsis	Enable down-when-looped tunneling
Context	configure port port ethernet down-when-looped tunneling <i>boolean</i>
Tree	tunneling
Default	true
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

use-broadcast-address *boolean*

Synopsis	Use broadcast MAC address for destination MAC address
Context	configure port port ethernet down-when-looped use-broadcast-address <i>boolean</i>
Tree	use-broadcast-address
Description	<p>When configured to true, the router declares a loop when the destination MAC address matches the broadcast MAC address.</p> <p>When configured to false, the router declares a loop when the destination MAC address matches the MAC address of the Ethernet port.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplex *keyword*

Synopsis	Duplex type for the fast Ethernet port
Context	configure port port ethernet duplex <i>keyword</i>
Tree	duplex

Description	This command configures the duplex of a Fast Ethernet port when autonegotiation is disabled. This command setting is ignored if autonegotiation is enabled for the port.
Options	full, half
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

efm-oam

Synopsis	Enter the efm-oam context
Context	configure port <i>port</i> ethernet efm-oam
Tree	efm-oam
Description	Commands in this context configure EFM-OAM attributes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-remote-loopback *boolean*

Synopsis	Enable reactions to loopback control OAMPDUs from peers
Context	configure port <i>port</i> ethernet efm-oam accept-remote-loopback <i>boolean</i>
Tree	accept-remote-loopback
Description	When configured to true , the router enables reactions to loopback control OAM PDUs from peers.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the EFM OAM operation
Context	configure port <i>port</i> ethernet efm-oam admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

hold-time *number*

Synopsis	Wait time before protocol returns to operational state
Context	configure <i>port port ethernet efm-oam hold-time number</i>
Tree	<i>hold-time</i>
Description	<p>This command specifies the time the EFM-OAM protocol waits before going back to the operational state after leaving the operational state. The hold time does not apply if the EFM-OAM protocol moved from the operational state to link fault.</p> <p>A hold-time value of zero indicates that there is no delay in transitioning to the operational state. A non-zero value causes the EFM-OAM protocol to attempt to negotiate with a peer if possible, but it remains in the send-local-remote-ok state until the hold time has expired if negotiation is successful.</p> <p>If the EFM-OAM protocol is administratively disabled while it is in the operational state and then re-enabled when a non-zero hold time is configured, EFM-OAM attempts transition to the operational state immediately.</p>
Range	1 to 50
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-efm-state *boolean*

Synopsis	Suppress port state changes for EFM-OAM faults
Context	configure <i>port port ethernet efm-oam ignore-efm-state boolean</i>
Tree	<i>ignore-efm-state</i>
Description	<p>When configured to true, the ETH-OAM protocol does not impact the state of the port when there is a failure in the protocol state machine (discovery, configuration, timeout, loops, and so on). There is only a protocol warning message on the port.</p> <p>When configured to false, the port state is affected by any existing EFM-OAM protocol fault condition.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Mode of OAM operation for the Ethernet port
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>efm-oam</i> <i>mode</i> <i>keyword</i>
Tree	<i>mode</i>
Description	<p>This command configures the mode of OAM operation for the Ethernet port.</p> <p>These two modes differ in that active mode causes the port to continually send out EFM-OAM information PDUs while passive mode waits for the peer to initiate the negotiation process. A passive mode port cannot initiate monitoring activities (such as loopback) with the peer.</p>
Options	<p>passive – Rely on peer to begin negotiation and monitoring</p> <p>active – Provide capability to begin negotiation and monitoring</p>
Default	active
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Multiplier for the transmit interval of OAMPDUs
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>efm-oam</i> <i>multiplier</i> <i>number</i>
Tree	<i>multiplier</i>
Description	This command configures the multiplier for the transmit interval to set the local link down timer.
Range	2 to 5
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-rdi-rx

Synopsis	Enter the peer-rdi-rx context
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>efm-oam</i> <i>peer-rdi-rx</i>
Tree	<i>peer-rdi-rx</i>
Description	Commands in this context allow an action to be configured for the various event conditions that can be received from a peer under the context of the EFM-OAM protocol.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

critical-event *keyword*

Synopsis	Action taken after receipt of critical event flag
Context	configure port port ethernet efm-oam peer-rdi-rx critical-event <i>keyword</i>
Tree	critical-event
Description	This command defines how to react to the reception of a critical event flag field set in the informational OAMPDU.
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dying-gasp *keyword*

Synopsis	Action taken after receipt of dying gasp flag
Context	configure port port ethernet efm-oam peer-rdi-rx dying-gasp <i>keyword</i>
Tree	dying-gasp
Description	This command defines how to react to the reception of a dying gasp flag field set in the informational OAMPDU.
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-notification *keyword*

Synopsis	Action taken after receipt of event TLVs
Context	configure port port ethernet efm-oam peer-rdi-rx event-notification <i>keyword</i>
Tree	event-notification
Description	This command defines the reaction to the reception of event TLVs contained in the event notification OAMPDU. The event TLVs contained in the event notification OAMPDU are analyzed to determine if the peer has crossed the error threshold for the window. The analysis does not consider any local SDs or SF thresholds. The analysis is based solely on the information received from the peer. The analysis is performed on all event TLVs contained in the event notification OAMPDU without regard for the support

of specific error counters. In the case of symbol errors, a threshold below the error rate can be used to return the port to service.

Options	log-only, port-out-of-service
Default	log-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-fault *keyword*

Synopsis	Action taken after receipt of link fault flag
Context	configure port port ethernet efm-oam peer-rdi-rx link-fault <i>keyword</i>
Tree	link-fault
Description	This command defines how to react to the reception of a link fault flag set in the informational PDU from the peer.
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-loopback-forward-non-efm-frames *boolean*

Synopsis	Allow the forwarding of non-EFM frames on the port
Context	configure port port ethernet efm-oam remote-loopback-forward-non-efm-frames <i>boolean</i>
Tree	remote-loopback-forward-non-efm-frames
Description	When configured to true , the router forwards non-EFM traffic that is received from the EFM peer when in remote loopback state.
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval of OAMPDUs
Context	configure port port ethernet efm-oam transmit-interval <i>number</i>
Tree	transmit-interval

Range	1 to 600
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trigger-fault *keyword*

Synopsis	Flag setting in the information OAMPDU
Context	configure port port ethernet efm-oam trigger-fault <i>keyword</i>
Tree	trigger-fault
Description	This command configures the appropriate flag field in the information OAMPDU, bursting three consecutive packets during the off cycle. If the local port state is operational, this command changes the local port state to "Link Up". If the local port state is not operational, this configuration is installed as an EFM reason to prevent the port from returning to an up operational state. This command can be used as a precursor to administratively disabling a port. This terminates the peering relationship without having to wait for protocol timeouts, assuming the peer supports the necessary action when receiving the dying gasp or critical event flag setting.
Options	dying-gasp, critical-event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunneling *boolean*

Synopsis	Enable EFM-OAM PDU tunneling
Context	configure port port ethernet efm-oam tunneling <i>boolean</i>
Tree	tunneling
Description	When configured to true , the router enables EFM-OAM PDU tunneling. Enabling tunneling allows a port mode Epipe SAP to pass OAM frames through the pipe to the far end. When configured to false , tunneling is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure port port ethernet egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-bn-rate-changes *boolean*

Synopsis	Allow rate changes in ETH-BN messages on port-based MEP
Context	configure port port ethernet egress eth-bn-rate-changes <i>boolean</i>
Tree	eth-bn-rate-changes
Description	<p>When configured to true, this command allows rate changes received in ETH-BN messages on a port-based MEP to update the egress rate used on the port.</p> <p>This command is not supported for all MDA types.</p> <p>When configured to false, rate changes in ETH-BN messages are denied.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port port ethernet egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure port port ethernet egress port-scheduler-policy overrides
Tree	overrides
Description	Commands in this context configure egress scheduler overrides.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

level [*priority-level*] *number*

Synopsis Enter the **level** list instance
Context **configure** *port port ethernet egress port-scheduler-policy overrides level number*
Tree *level*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[priority-level] *number*

Synopsis Port priority level to be overridden
Context **configure** *port port ethernet egress port-scheduler-policy overrides level number*
Tree *level*
Range 1 to 8
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

rate

Synopsis Enter the **rate** context
Context **configure** *port port ethernet egress port-scheduler-policy overrides level number rate*
Tree *rate*
Notes The following elements are part of a choice: **percent-rate** or **rate**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis CIR
Context **configure** *port port ethernet egress port-scheduler-policy overrides level number rate cir (number | keyword)*

Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR
Context	configure port port ethernet egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate

Synopsis	Enter the max-rate context
Context	configure port port ethernet egress port-scheduler-policy overrides max-rate
Tree	max-rate
Description	Commands in this context override the max-rate command found in the port scheduler policy associated with the port. When a maximum rate is defined at the port or channel level, the port scheduler's policy max-rate command is ignored.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate (*number* | *keyword*)

Synopsis	PIR rate
Context	configure port port ethernet egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate

Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Egress scheduler policy name
Context	configure port port ethernet egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Rate of egress traffic
Context	configure port port ethernet egress rate <i>number</i>
Tree	rate
Description	<p>This command configures the rate of traffic leaving the network. An event log is generated each time the egress rate is modified unless the port is part of a LAG.</p> <p>This command is not supported for all MDA types.</p>
Max. range	-2147483648 to 2147483647
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encap-type *keyword*

Synopsis	Encapsulation method for the Ethernet port
Context	configure port port ethernet encap-type <i>keyword</i>
Tree	encap-type

Options	null, dot1q, qinq
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure port <i>port</i> ethernet eth-cfm
Tree	eth-cfm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep md-admin-name *reference* ma-admin-name *reference* mep-id *number*

Synopsis	Enter the mep list instance
Context	configure port <i>port</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Description	Commands in this context provision an 802.1ag maintenance endpoint (MEP). Port-based MEPs and LAG-based MEPs are mutually exclusive. If a LAG member port includes a MEP, the configuration of a MEP on the LAG fails. If a LAG includes the configuration of a MEP, the configuration of MEPs on the LAG member ports fails.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure port <i>port</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>admin-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain admin-name association admin-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ais

Synopsis	Enable the ais context
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Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais
Tree	ais
Description	Commands in this context enable the reception of AIS messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i>
Tree	client-meg-level
Description	This command configures the client Maintenance Entity Group (MEG) level to use for AIS message generation. One restriction is that the client MEG level must be higher than the local MEG level. Only the lowest client MEG level is used for facility MEPs.
Range	1 to 7
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>
Tree	interface-support
Description	<p>When configured to true, the system enables the generation of AIS PDUs based on the associated endpoint state.</p> <p>AIS on Down MEPs triggers and clears based on the operational status of the entity it is configured on. If CCM is configured to true, transmission of the AIS PDU is based on either the nonoperational state of the entity or on any CCM defect conditions. AIS generation ceases if both the operational state is up and CCM has no defect conditions. If the MEP is not enabled with CCM, the operational state of the entity is the only consideration, assuming the command is present for the MEP.</p> <p>When configured to false, the generation of AIS PDUs is disabled.</p>
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ais interval number
Tree	interval
Range	1 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ais low-priority-defect keyword
Tree	low-priority-defect
Options	all-def – Generate AIS frame for any defect in CCM state machine mac-rem-err-xcon – Generate AIS frame for def-mac-status defect or higher
Default	all-def
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ais priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm boolean

Synopsis	Generate CCM messages
Context	configure port port ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean
Tree	ccm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-ltm-priority number

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure port port ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-tlv-ignore keyword

Synopsis	TLV to ignore on reception
Context	configure port port ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword
Tree	ccm-tlv-ignore
Description	<p>This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.</p> <p>When unconfigured, the MEP processes all the recognized TLVs.</p>
Options	interface-status, port-status
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure port <i>port</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-bn

Synopsis	Enter the eth-bn context
Context	configure port <i>port</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-bn
Tree	eth-bn
Description	Commands in this context configure Ethernet Bandwidth Notification (ETH-BN) message handling.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Enable the reception and processing of ETH-BN messages
Context	configure port <i>port</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-bn receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command enables the reception and processing of ETH-BN messages and the retrieval and processing of the current bandwidth field for inclusion in dynamic egress rate adjustments.</p> <p>The received rate is an Layer 2 rate, and is expected to be in Mb/s. If this rate is a link rate (including preamble, start frame delimiter, and inter-frame gap), this would require the use of network egress queue groups.</p> <p>When configured to false, message reception is disabled.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

rx-update-pacing *number*

Synopsis	Pace of messages to and from ETH-CFM to QoS subsystems
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-bn rx-update-pacing <i>number</i>
Tree	rx-update-pacing
Description	This command sets the pace for update messages to and from the ETH-CFM subsystem to the QoS subsystem. The most recent update messages are held by the ETH-CFM subsystem, but the most recent update is held until the expiration of the pacing timer.
Range	1 to 600
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port port ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure port port ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure port port ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure port port ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

facility-fault *boolean*

Synopsis Allow the facility MEP to generate a network action

Context **configure** [port](#) [port](#) [ethernet](#) [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **facility-fault** *boolean*

Tree [facility-fault](#)

Description When configured to **true**, the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition.
When configured to **false**, the system monitors transmissions and reports fault conditions.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [port](#) [port](#) [ethernet](#) [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis MAC address of the MEP

Context **configure** [port](#) [port](#) [ethernet](#) [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **mac-address** *mac-unicast-address-no-zero*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Introduced25.3.R2

Platforms7705 SAR Gen 2

one-way-delay-threshold *number*

SynopsisThreshold time limit for the one-way delay test

Context**configure** port port ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id number one-way-delay-threshold *number*

Treeone-way-delay-threshold

Range0 to 600

Unitsseconds

Default3

Introduced25.3.R2

Platforms7705 SAR Gen 2

hold-time

SynopsisEnter the **hold-time** context

Context**configure** port port ethernet hold-time

Treehold-time

Introduced25.3.R2

Platforms7705 SAR Gen 2

down *number*

SynopsisDelay after interface goes from up state to down state

Context**configure** port port ethernet hold-time down *number*

Tree**down**

Description

This command specifies the delay to notify the upper layers after an interface transitions from an up state to a down state.

When an interface transitions from an up state to a down state, it is immediately advertised to the rest of the system if the down interval is zero, but if the down interval is greater than zero, interface down transitions are not advertised to upper layers until the down interval has expired.

Range1 to 3600000

Introduced25.3.R2

Platforms 7705 SAR Gen 2

units *keyword*

Synopsis Hold time units

Context **configure** *port port ethernet hold-time units keyword*

Tree *units*

Options seconds, centiseconds

Default seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

up *number*

Synopsis Delay after interface goes from down state to up state

Context **configure** *port port ethernet hold-time up number*

Tree *up*

Description This command specifies the delay to notify the upper layers after an interface transitions from a down state to an up state.

 When an interface transitions from a down state to an up state, it is immediately advertised as up to the rest of the system if the up interval is zero, but if the up interval is greater than zero, up transitions are not advertised until the up interval has expired.

Range 1 to 3600000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ingress

Synopsis Enter the **ingress** context

Context **configure** *port port ethernet ingress*

Tree *ingress*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pre-classifier

Synopsis	Enter the pre-classifier context
Context	configure port port ethernet ingress pre-classifier
Tree	pre-classifier
Description	Commands in this context attach an ingress preclassifier policy to the specified port.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Preclassifier policy name
Context	configure port port ethernet ingress pre-classifier policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos pre-classifier-policy <i>named-item-64</i>
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Maximum ingress bandwidth
Context	configure port port ethernet ingress rate <i>number</i>
Tree	rate
Max. range	-2147483648 to 2147483647
Units	megabps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP-tunnel *boolean*

Synopsis	Enable LACP packet tunneling for the Ethernet port
Context	configure port port ethernet lACP-tunnel <i>boolean</i>
Tree	lACP-tunnel
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lldp

Synopsis Enter the **lldp** context

Context **configure** [port](#) [port](#) [ethernet](#) **lldp**

Tree [lldp](#)

Description Commands in this context configure the Link Layer Discovery Protocol (LLDP) on the port.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dest-mac [[mac-type](#)] keyword

Synopsis Enter the **dest-mac** list instance

Context **configure** [port](#) [port](#) [ethernet](#) **lldp** **dest-mac** *keyword*

Tree [dest-mac](#)

Description Commands in this context configure destination MAC address commands.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[[mac-type](#)] keyword

Synopsis Destination MAC address type

Context **configure** [port](#) [port](#) [ethernet](#) **lldp** **dest-mac** *keyword*

Tree [dest-mac](#)

Options
 nearest-bridge – Use the nearest bridge
 nearest-non-tpmr – Use nearest non-Two-Port MAC Relay (TPMR)
 nearest-customer – Use the nearest customer

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

notification *boolean*

Synopsis Enable LLDP notifications

Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> notification <i>boolean</i>
Tree	notification
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id-subtype *keyword*

Synopsis	Port ID TLV encoding method for transmission to peer
Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> port-id-subtype <i>keyword</i>
Tree	port-id-subtype
Options	tx-if-alias, tx-if-name, tx-local
Default	tx-local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Enable LLDP agent to receive but not transmit frames
Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> receive <i>boolean</i>
Tree	receive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit *boolean*

Synopsis	Enable the LLDP agent to transmit frames
Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> transmit <i>boolean</i>
Tree	transmit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-nearest-bridge *boolean*

Synopsis	Allow the received LLDP packets to be tunneled
Context	configure <i>port</i> <i>port</i> <i>ethernet lldp dest-mac</i> <i>keyword</i> tunnel-nearest-bridge <i>boolean</i>
Tree	tunnel-nearest-bridge
Description	<p>When configured to true, the system allows LLDP packets received on the port with the destination address of the nearest bridge to be tunneled without being intercepted on the local port.</p> <p>When configured to false, the system disables nearest bridge tunneling.</p> <p>The nearest-bridge option in the configure port ethernet lldp dest-mac mac-type command must be disabled for tunneling to occur. This is applicable to NULL SAP Epipe and VPLS services only.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-nearest-customer *boolean*

Synopsis	Enable the nearest customer tunneling
Context	configure <i>port</i> <i>port</i> <i>ethernet lldp dest-mac</i> <i>keyword</i> tunnel-nearest-customer <i>boolean</i>
Tree	tunnel-nearest-customer
Description	<p>When configured to true, the system allows LLDP packets received on the port with the destination address of the nearest customer to be tunneled without being intercepted on the local port.</p> <p>When configured to false, the system disables nearest customer tunneling.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-nearest-non-tpmr *boolean*

Synopsis	Enable the nearest non-TPMR tunneling
Context	configure <i>port</i> <i>port</i> <i>ethernet lldp dest-mac</i> <i>keyword</i> tunnel-nearest-non-tpmr <i>boolean</i>
Tree	tunnel-nearest-non-tpmr
Description	When configured to true , the system allows LLDP packets received on the port with the destination address of the nearest non-TPMR to be tunneled without being intercepted on the local port.

	When configured to false , the system disables nearest non-TPMR tunneling.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-mgmt-address [[mgmt-address-system-type](#)] *keyword*

Synopsis	Enter the tx-mgmt-address list instance
Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> tx-mgmt-address <i>keyword</i>
Tree	tx-mgmt-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mgmt-address-system-type] *keyword*

Synopsis	Management address to transmit
Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> tx-mgmt-address <i>keyword</i>
Tree	tx-mgmt-address
Options	oob, system, system-ipv6, oob-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of transmitting management address
Context	configure port <i>port</i> ethernet lldp dest-mac <i>keyword</i> tx-mgmt-address <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-tlvs

Synopsis	Enter the tx-tlvs context
Context	configure port port ethernet lldp dest-mac <i>keyword</i> tx-tlvs
Tree	tx-tlvs
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-desc *boolean*

Synopsis	Transmit port description TLVs
Context	configure port port ethernet lldp dest-mac <i>keyword</i> tx-tlvs port-desc <i>boolean</i>
Tree	port-desc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sys-cap *boolean*

Synopsis	Transmit system capabilities TLVs
Context	configure port port ethernet lldp dest-mac <i>keyword</i> tx-tlvs sys-cap <i>boolean</i>
Tree	sys-cap
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sys-desc *boolean*

Synopsis	Transmit system description TLVs
Context	configure port port ethernet lldp dest-mac <i>keyword</i> tx-tlvs sys-desc <i>boolean</i>
Tree	sys-desc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sys-name *boolean*

Synopsis	Transmit system name TLVs
Context	configure port port ethernet lldp dest-mac <i>keyword</i> tx-tlvs sys-name <i>boolean</i>
Tree	sys-name
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm for the Ethernet port
Context	configure port port ethernet load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address of the Ethernet port
Context	configure port port ethernet mac-address <i>mac-address</i>
Tree	mac-address
Description	<p>This command specifies the MAC address of the Ethernet port. Allowed values are any non-broadcast, non-multicast MAC, and non-IEEE reserved MAC addresses.</p> <p>The default value indicates that an operation MAC address is to be assigned from the chassis MAC address pool.</p>
Default	00:00:00:00:00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-frame-length *number*

Synopsis	Minimum transmitted frame length
Context	configure port port ethernet min-frame-length <i>number</i>

Tree	min-frame-length
Description	This command configures the minimum transmitted frame length.
Range	64 68 72
Units	bytes
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Operation mode for the Ethernet port
Context	configure port port ethernet mode <i>keyword</i>
Tree	mode
Options	access, network, hybrid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu *number*

Synopsis	Maximum payload MTU size for the Ethernet port
Context	configure port port ethernet mtu <i>number</i>
Tree	mtu
Description	<p>This command configures the maximum payload MTU size for the Ethernet port. This command indirectly defines the largest physical packet the port can transmit or the far-end Ethernet port can receive. Packets that cannot be fragmented at egress and exceed the MTU size are discarded.</p> <p>The MTU size includes the destination MAC address, source MAC address, the Ethertype or length field, and the complete Ethernet payload. This value does not include the preamble, start of frame delimiter, or the trailing CRC.</p>
Range	512 to 9800
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure <i>port port</i> <i>ethernet network</i>
Tree	<i>network</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy that applies to the network port
Context	configure <i>port port</i> <i>ethernet network accounting-policy</i> <i>reference</i>
Tree	<i>accounting-policy</i>
Reference	configure <i>log accounting-policy</i> <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure <i>port port</i> <i>ethernet network collect-stats</i> <i>boolean</i>
Tree	<i>collect-stats</i>
Description	<p>When configured to true, this command enables the collection of accounting and statistical data for the network interface. When applying accounting policies, by default the data is collected in the appropriate records and written to the designated billing file.</p> <p>When configured to false, the statistics are still accumulated by the XCM or IOM cards. However, the CPU does not obtain the results and write them to the billing file.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure <i>port port</i> <i>ethernet network egress</i>
Tree	<i>egress</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group *[queue-group-name] reference instance-id number*

Synopsis	Enter the queue-group list instance
Context	configure <i>port port ethernet network egress queue-group reference instance-id number</i>
Tree	<i>queue-group</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-group-name] reference

Synopsis	Queue group name
Context	configure <i>port port ethernet network egress queue-group reference instance-id number</i>
Tree	<i>queue-group</i>
Reference	configure <i>qos queue-group-templates egress queue-group named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance-id number

Synopsis	Instance ID for the egress queue group
Context	configure <i>port port ethernet network egress queue-group reference instance-id number</i>
Tree	<i>queue-group</i>
Range	1 to 65535
MD-CLI default	1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy *reference*

Synopsis	Policer control policy for the QoS egress queue group
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> policer-control-policy <i>reference</i>

Tree	policer-control-policy
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[queue-id](#)] *reference*

Synopsis	Queue ID
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Description	<p>Commands in this context specify the method used by the system to derive the operational CIR and PIR settings when the queue is provisioned in hardware. For the CIR and PIR commands individually, the system attempts to find the best operational rate depending on the defined constraint.</p> <p>Commands in this context are ignored for egress HSQ queue group queues that are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the adaptation rule is performed under the hs-wrr-group command within the egress queue group template.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure <i>port port ethernet network egress queue-group reference instance-id number queue-overrides queue reference drop-tail low percent-reduction-from-mbs (number keyword)</i>
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure <i>port port ethernet network egress queue-group reference instance-id number queue-overrides queue reference mbs (number keyword)</i>
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure <i>port port ethernet network egress queue-group reference instance-id number queue-overrides queue reference percent-rate</i>
Tree	percent-rate
Description	<p>Commands in this context specify percent rates.</p> <p>This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the</p>

configuration of the percent rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR for the queue
Context	configure port port ethernet network egress queue-group reference instance-id number queue-overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR for the queue
Context	configure port port ethernet network egress queue-group reference instance-id number queue-overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure port port ethernet network egress queue-group reference instance-id number queue-overrides queue reference rate
Tree	rate
Description	Commands in this context specify the administrative PIR and CIR for the queue. Defining a PIR does not necessarily guarantee that the queue can transmit at the

intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

This command can be executed at anytime, altering the PIR and CIR rates for all queues created through the association of the SAP egress QoS policy with the queue ID.

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure port <i>port</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 20000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the queue
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Context	configure <i>port</i> <i>port</i> <i>ethernet network egress queue-group reference</i> <i>instance-id</i> <i>number</i> <i>queue-overrides queue reference rate</i> <i>pir</i> (<i>number</i> <i>keyword</i>)
Tree	<i>pir</i>
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure <i>port</i> <i>port</i> <i>ethernet network egress queue-group reference</i> <i>instance-id</i> <i>number</i> <i>scheduler-policy</i>
Tree	<i>scheduler-policy</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy for the QoS egress queue group
Context	configure <i>port</i> <i>port</i> <i>ethernet network egress queue-group reference</i> <i>instance-id</i> <i>number</i> <i>scheduler-policy policy-name reference</i>
Tree	<i>policy-name</i>
Reference	configure <i>qos scheduler-policy</i> <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-policy *reference*

Synopsis	Network queue policy
Context	configure port port ethernet network egress queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ptp-asymmetry *number*

Synopsis	PTP asymmetry delay on the Ethernet port
Context	configure port port ethernet ptp-asymmetry <i>number</i>
Tree	ptp-asymmetry
Description	This command configures the PTP asymmetry delay on the Ethernet port. This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.
Max. range	-2147483648 to 2147483647
Units	nanoseconds
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ptp-timestamping

Synopsis	Enable the ptp-timestamping context
Context	configure port port ethernet ptp-timestamping
Tree	ptp-timestamping
Description	Commands in this context configure port-based filtering for the ingress 1588 timestamping of PTP messages to match multiple PTP flows.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of PTP timestamping
Context	configure port port ethernet ptp-timestamping admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipv4-address *ipv4-address*

Synopsis	IPv4 destination address for PTP messages into port
Context	configure port <i>port</i> ethernet ptp-timestamping ipv4-address <i>ipv4-address</i>
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipv6-address *ipv6-address*

Synopsis	IPv6 destination address for PTP messages into port
Context	configure port <i>port</i> ethernet ptp-timestamping ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ptp-tunnel *boolean*

Synopsis	Enable the tunneling of PTP frames on the port
Context	configure port <i>port</i> ethernet ptp-tunnel <i>boolean</i>
Tree	ptp-tunnel
Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

qinq-etype *etype*

Synopsis	Ethertype for QinQ encapsulation
Context	configure <i>port port ethernet qinq-etype etype</i>
Tree	<i>qinq-etype</i>
Default	33024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

report-alarm

Synopsis	Enter the report-alarm context
Context	configure <i>port port ethernet report-alarm</i>
Tree	<i>report-alarm</i>
Description	<p>Commands in this context specify the settings for alarm generation and alarm clear notifications for the port.</p> <p>Note: For some DWDM transceivers, if the configure port dwdm coherent rx-los-reaction squelch command is disabled, the signal-fail and no-am-lock alarm conditions are not reported when the media side of the transceiver has an RX LOS condition.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alignment-marker-not-locked *boolean*

Synopsis	Report 40G/100G PCS Alignment Marker Loss of Lock
Context	configure <i>port port ethernet report-alarm alignment-marker-not-locked boolean</i>
Tree	<i>alignment-marker-not-locked</i>
Description	When configured to true , Alignment Marker Loss of Lock alarms are reported for this port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-not-locked *boolean*

Synopsis	Report 40G/100G PCS Lanes Not Block Locked
Context	configure <i>port port ethernet report-alarm block-not-locked boolean</i>

Tree [block-not-locked](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

duplicate-lane *boolean*

Synopsis Report 40G/100G PCS Duplicate Lane Marker alarm
Context **configure** [port](#) [port](#) [ethernet](#) [report-alarm](#) [duplicate-lane](#) *boolean*
Tree [duplicate-lane](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

frame-not-locked *boolean*

Synopsis Report "not locked on the Ethernet framing sequence"
Context **configure** [port](#) [port](#) [ethernet](#) [report-alarm](#) [frame-not-locked](#) *boolean*
Tree [frame-not-locked](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

high-ber *boolean*

Synopsis Report High Bit Error Rate
Context **configure** [port](#) [port](#) [ethernet](#) [report-alarm](#) [high-ber](#) *boolean*
Tree [high-ber](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

local *boolean*

Synopsis Report local faults
Context **configure** [port](#) [port](#) [ethernet](#) [report-alarm](#) [local](#) *boolean*
Tree [local](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

remote *boolean*

Synopsis	Report remote faults
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>report-alarm</i> <i>remote</i> <i>boolean</i>
Tree	<i>remote</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-fail *boolean*

Synopsis	Report Ethernet signal lost alarm
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>report-alarm</i> <i>signal-fail</i> <i>boolean</i>
Tree	<i>signal-fail</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rs-fec-mode *keyword*

Synopsis	RS-FEC mode on the Ethernet port
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>rs-fec-mode</i> <i>keyword</i>
Tree	<i>rs-fec-mode</i>
Description	<p>This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet port.</p> <p>See "Forward Error Correction" in the <i>7705 SAR Gen 2 Interface Configuration Guide</i> for more information about FEC settings.</p>
Options	cl91-514-528, cl74, cl108
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

speed *number*

Synopsis	Ethernet port speed
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>speed</i> <i>number</i>
Tree	<i>speed</i>
Description	This command configures the port speed for ports that support multiple speeds. This applies to the following:

- Fast Ethernet when autonegotiation is not enabled
- 10/100/1000 Mb/s Ethernet when autonegotiation is not enabled
- 10/1G ports supporting 10G SFP+ or 1G SFP
- 40/100G ports supporting QSFP28s on non connector-based MDAs

If autonegotiation is enabled for the port, this command setting is ignored. Speed cannot be configured for ports that are part of a LAG.

Range	10 100 1000 10000 25000 40000 50000 100000
Units	megabps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm

Synopsis	Enter the ssm context
Context	configure port port ethernet ssm
Tree	ssm
Description	Commands in this context configure the Ethernet Synchronization Messaging Channel (ESMC) for the Ethernet port. The ESMC carries the Synchronization Status Message (SSM) code representing the quality level of the source of the frequency of the central clock of the node.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the ESMC for the Ethernet port
Context	configure port port ethernet ssm admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

code-type *keyword*

Synopsis	Encoding type of SSMs
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Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>ssm</i> <i>code-type</i> <i>keyword</i>
Tree	<i>code-type</i>
Description	This command configures the use of the SDH/SONET set of values to encode SSMs. Configuring the network type is only applicable to SyncE ports. It is not configurable on SONET/SDH ports.
Options	sonet – G.781 Option I compliant network sdh – G.781 Option II compliant network
Default	sdh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

esmc-tunnel *boolean*

Synopsis	Tunnel ESMC frames in Epipe or VPLS services
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>ssm</i> <i>esmc-tunnel</i> <i>boolean</i>
Tree	<i>esmc-tunnel</i>
Description	When configured to true , ESMC frames that are received into the Ethernet port can be tunneled in an Epipe or VPLS service. When configured to false , ESMC frames are extracted upon reception by the port and are not tunneled through the service.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-dus *boolean*

Synopsis	Force QL value transmitted be set to QL-DNU or QL-DUS
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>ssm</i> <i>tx-dus</i> <i>boolean</i>
Tree	<i>tx-dus</i>
Description	When configured to true , the router sets the QL value transmitted from the SSM channel of the SyncE port to QL-DUS or QL-DNU. This capability is provided to block the use of the interface from the 7705 SAR Gen 2 for timing purposes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-extended-ql-tlv *boolean*

Synopsis	Include the Extended QL TLV in transmitted ESMC
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> <i>ssm</i> tx-extended-ql-tlv <i>boolean</i>
Tree	tx-extended-ql-tlv
Description	When configured to true , the router includes the Extended QL TLV in transmitted ESMC messages. When configured to false , the router turns off the inclusion of the TLV in the ESMC messages.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

util-stats-interval *number*

Synopsis	Interval to calculate utilization statistics
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> util-stats-interval <i>number</i>
Tree	util-stats-interval
Description	This command configures the interval used to calculate the utilization statistics. Port utilization statistics are only available for physical Ethernet ports on a host system. These statistics are not available for the following: <ul style="list-style-type: none"> • Ethernet ports on an Ethernet satellite • PXC ports • vsm-cca-xp ports
Range	30 to 600
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

xgig *keyword*

Synopsis	Ethernet port mode
Context	configure <i>port</i> <i>port</i> <i>ethernet</i> xgig <i>keyword</i>
Tree	xgig
Description	This command configures a 10 Gb/s interface to be in LAN or WAN mode.

When configuring the port to be in WAN mode, certain SONET/SDH commands can be changed to reflect the SONET/SDH requirements for the port. When configuring the port to be in LAN mode, all SONET/SDH commands are pre-determined and not configurable.

Options	lan, wan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnss

Synopsis	Enter the gnss context
Context	configure port port gnss
Tree	gnss
Description	Commands in this context configure GNSS port attributes.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

antenna-cable-delay *number*

Synopsis	Signal delay resulting from GNSS antenna cable length
Context	configure port port gnss antenna-cable-delay <i>number</i>
Tree	antenna-cable-delay
Description	This command configures the expected signal delay resulting from the length of the GNSS antenna cable.
Range	0 to 32767
Units	nanoseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

constellation

Synopsis	Enter the constellation context
Context	configure port port gnss constellation
Tree	constellation

Description	Commands in this context configure the GNSS systems that are used by the GNSS receiver.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

galileo *boolean*

Synopsis	Enable GNSS receiver to use GALILEO constellation type
Context	configure <i>port port gnss constellation galileo boolean</i>
Tree	<i>galileo</i>
Description	When configured to true , this command enables the use of the European Galileo GNSS system.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

glonass *boolean*

Synopsis	Enable GNSS receiver to use GLONASS constellation type
Context	configure <i>port port gnss constellation glonass boolean</i>
Tree	<i>glonass</i>
Description	When configured to true , the system enables the use of the Russian GLONASS GNSS system. Note: The glonass command is currently not supported.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

gps *boolean*

Synopsis	Enable GNSS receiver to use GPS constellation type
Context	configure <i>port port gnss constellation gps boolean</i>
Tree	<i>gps</i>
Description	When configured to true , this command enables the use of the American GPS GNSS system.

	When configured to false , this command disables the use of the American GPS GNSS system.
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

elevation-mask-angle *number*

Synopsis	Minimum elevation mask angle
Context	configure <i>port</i> <i>port</i> gnss elevation-mask-angle <i>number</i>
Tree	elevation-mask-angle
Description	<p>This command configures the elevation mask angle, which provides a method of filtering satellites used by the system.</p> <p>Satellites with low elevation may provide degraded accuracy because of the long signal path through the atmosphere. Signals from satellites below the configured minimum satellite elevation are not used.</p> <p>Nokia does not recommend configuring an elevation mask angle below 10.</p>
Range	0 to 89
Units	degrees angle
Default	10
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

signal-cnr-mask *number*

Synopsis	Signal CNR mask strength in dB-Hz
Context	configure <i>port</i> <i>port</i> gnss signal-cnr-mask <i>number</i>
Tree	signal-cnr-mask
Description	<p>This command configures the threshold to determine the signal strength of the CNR mask to filter satellites used by the system. Satellites with CNR values below the configured minimum threshold may negatively impact accuracy, and their signals are ignored.</p>
Range	0 to 37
Default	30
Introduced	26.7.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure port port monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures the operational group to monitor the operational group state. The state of the operational group affects the state of this port. When the operational group is inactive, the state of the port goes down and powers off the port to signal to the CE that the connected port is not available.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure port port network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure port port network egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [[name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure port port network egress pool <i>named-item</i>
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Pool name
Context	configure port <i>port</i> network egress pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	default
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group ID
Context	configure port <i>port</i> oper-group <i>reference</i>
Tree	oper-group
Description	This command associates the port with the specified operational group. The port becomes a member of the operational group.
Reference	configure service oper-group <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

otu

Synopsis	Enable the otu context
Context	configure port <i>port</i> otu
Tree	otu
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

async-mapping *boolean*

Synopsis	Allow asynchronous mapping of the payload inside OTU
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Context	configure port <i>port</i> otu async-mapping <i>boolean</i>
Tree	async-mapping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec keyword

Synopsis	Forwarding Error Correction (FEC) encapsulation on port
Context	configure port <i>port</i> otu fec <i>keyword</i>
Tree	fec
Options	none, g709, enhanced
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fine-granularity-ber

Synopsis	Enter the fine-granularity-ber context
Context	configure port <i>port</i> otu fine-granularity-ber
Tree	fine-granularity-ber
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-degrade

Synopsis	Enter the signal-degrade context
Context	configure port <i>port</i> otu fine-granularity-ber signal-degrade
Tree	signal-degrade
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear

Synopsis	Enter the clear context
Context	configure port <i>port</i> otu fine-granularity-ber signal-degrade clear
Tree	clear

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Multiplier of the SD clear threshold
Context	configure port port otu fine-granularity-ber signal-degrade clear multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	SD clear threshold
Context	configure port port otu fine-granularity-ber signal-degrade clear threshold <i>number</i>
Tree	threshold
Range	3 to 10
Default	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise

Synopsis	Enter the raise context
Context	configure port port otu fine-granularity-ber signal-degrade raise
Tree	raise
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Multiplier of the SD raise threshold
Context	configure port port otu fine-granularity-ber signal-degrade raise multiplier <i>number</i>

Tree	multiplier
Range	10 to 99
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	SD raise threshold
Context	configure port port otu fine-granularity-ber signal-degrade raise threshold <i>number</i>
Tree	threshold
Range	3 to 9
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-failure

Synopsis	Enter the signal-failure context
Context	configure port port otu fine-granularity-ber signal-failure
Tree	signal-failure
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear

Synopsis	Enter the clear context
Context	configure port port otu fine-granularity-ber signal-failure clear
Tree	clear
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Threshold for the Multiplier of SD clear
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Context	configure port <i>port</i> otu fine-granularity-ber signal-failure clear multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold for the Multiplier of SD clear
Context	configure port <i>port</i> otu fine-granularity-ber signal-failure clear threshold <i>number</i>
Tree	threshold
Range	3 to 9
Default	6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

raise

Synopsis	Enter the raise context
Context	configure port <i>port</i> otu fine-granularity-ber signal-failure raise
Tree	raise
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	SF raise threshold
Context	configure port <i>port</i> otu fine-granularity-ber signal-failure raise multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	SF raise threshold
Context	configure port port otu fine-granularity-ber signal-failure raise threshold <i>number</i>
Tree	threshold
Range	3 to 8
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu2-lan-data-rate *keyword*

Synopsis	Data rate for 10GE LAN OTU2 on the port
Context	configure port port otu otu2-lan-data-rate <i>keyword</i>
Tree	otu2-lan-data-rate
Units	gigabps
Options	11.049, 11.096
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-monitoring

Synopsis	Enter the path-monitoring context
Context	configure port port otu path-monitoring
Tree	path-monitoring
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trail-trace-identifier

Synopsis	Enter the trail-trace-identifier context
Context	configure port port otu path-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expected

Synopsis	Enter the expected context
Context	configure port port otu path-monitoring trail-trace-identifier expected
Tree	expected
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-generated

Synopsis	Use the system generated TTI
Context	configure port port otu path-monitoring trail-trace-identifier expected auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port port otu path-monitoring trail-trace-identifier expected bytes string
Tree	bytes
String length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port port otu path-monitoring trail-trace-identifier expected string string
Tree	string
String length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mismatch-reaction *keyword*

Synopsis Reaction to a mismatched TTI

Context **configure** [port](#) [port](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) **mismatch-reaction** *keyword*

Tree [mismatch-reaction](#)

Options [squench-rx](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transmit

Synopsis Enter the **transmit** context

Context **configure** [port](#) [port](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) **transmit**

Tree [transmit](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

auto-generated

Synopsis Use the system generated TTI

Context **configure** [port](#) [port](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [transmit](#) **auto-generated**

Tree [auto-generated](#)

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bytes *string*

Synopsis TTI as a sequence of bytes

Context **configure** [port](#) [port](#) [otu](#) [path-monitoring](#) [trail-trace-identifier](#) [transmit](#) **bytes** *string*

Tree [bytes](#)

String length 0 to 192

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port port otu path-monitoring trail-trace-identifier transmit string <i>string</i>
Tree	string
String length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

payload-structure-identifier

Synopsis	Enter the payload-structure-identifier context
Context	configure port port otu payload-structure-identifier
Tree	payload-structure-identifier
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

payload

Synopsis	Enter the payload context
Context	configure port port otu payload-structure-identifier payload
Tree	payload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expected *keyword*

Synopsis	Expected received payload type of the PSI
Context	configure port port otu payload-structure-identifier payload expected <i>keyword</i>
Tree	expected
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82,

	reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched payload
Context	configure port port otu payload-structure-identifier payload mismatch-reaction <i>keyword</i>
Tree	mismatch-reaction
Options	squelch-rx
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit *keyword*

Synopsis	Transmit payload type
Context	configure port port otu payload-structure-identifier payload transmit <i>keyword</i>
Tree	transmit
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port port otu report-alarm
Tree	report-alarm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-fail boolean

Synopsis	Report FEC mode mismatch alarm
Context	configure port port otu report-alarm fec-fail <i>boolean</i>
Tree	fec-fail
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-sd boolean

Synopsis	Report Signal Degrade alarm
Context	configure port port otu report-alarm fec-sd <i>boolean</i>
Tree	fec-sd
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-sf boolean

Synopsis	Report Signal Fail alarm
Context	configure port port otu report-alarm fec-sf <i>boolean</i>
Tree	fec-sf
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-uncorr boolean

Synopsis	Report one or more Uncorrectable FEC errors alarm
Context	configure port port otu report-alarm fec-uncorr <i>boolean</i>
Tree	fec-uncorr
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

loc *boolean*

Synopsis Report OTU alarm for loss of clock
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [loc](#) *boolean*
Tree [loc](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lof *boolean*

Synopsis Report alarm for the loss of OTU framing
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [lof](#) *boolean*
Tree [lof](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lom *boolean*

Synopsis Report alarm for the loss of multi-frame
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [lom](#) *boolean*
Tree [lom](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

los *boolean*

Synopsis Report alarm for the loss of signal transitions on data
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [los](#) *boolean*
Tree [los](#)
Default true

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

odu-ais *boolean*

Synopsis Report ODU Alarm Indication Signal alarm
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [odu-ais](#) *boolean*
Tree [odu-ais](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

odu-bdi *boolean*

Synopsis Report PM Backward Defect Indication alarm
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [odu-bdi](#) *boolean*
Tree [odu-bdi](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

odu-lck *boolean*

Synopsis Report ODU Locked alarm
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [odu-lck](#) *boolean*
Tree [odu-lck](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

odu-oci *boolean*

Synopsis Report ODU Open Connection Indication alarm
Context **configure** [port](#) [port](#) [otu](#) [report-alarm](#) [odu-oci](#) *boolean*
Tree [odu-oci](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

odu-tim *boolean*

Synopsis	Report PM Trace ID Mismatch alarm
Context	configure port port otu report-alarm odu-tim <i>boolean</i>
Tree	odu-tim
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

opu-plm *boolean*

Synopsis	Report PSI Payload Type Mismatch alarm
Context	configure port port otu report-alarm opu-plm <i>boolean</i>
Tree	opu-plm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-ais *boolean*

Synopsis	Report OTU Alarm Indication Signal alarm
Context	configure port port otu report-alarm otu-ais <i>boolean</i>
Tree	otu-ais
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-bdi *boolean*

Synopsis	Report SM Backward Defect Indication alarm
Context	configure port port otu report-alarm otu-bdi <i>boolean</i>

Tree	otu-bdi
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-ber-sd *boolean*

Synopsis	Report SM Signal Degrade alarm
Context	configure port port otu report-alarm otu-ber-sd <i>boolean</i>
Tree	otu-ber-sd
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-ber-sf *boolean*

Synopsis	Report SM Signal Fail alarm
Context	configure port port otu report-alarm otu-ber-sf <i>boolean</i>
Tree	otu-ber-sf
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-biae *boolean*

Synopsis	Report SM Backward Incoming Alignment Error alarm
Context	configure port port otu report-alarm otu-biae <i>boolean</i>
Tree	otu-biae
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-iae *boolean*

Synopsis	Report SM Incoming Alignment Error alarm
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Context	configure port <i>port</i> otu report-alarm otu-iae <i>boolean</i>
Tree	otu-iae
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

otu-tim *boolean*

Synopsis	Report SM Trace ID Mismatch alarm
Context	configure port <i>port</i> otu report-alarm otu-tim <i>boolean</i>
Tree	otu-tim
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sd-threshold *number*

Synopsis	Error rate at which to declare signal degrade condition
Context	configure port <i>port</i> otu sd-threshold <i>number</i>
Tree	sd-threshold
Range	5 to 9
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

section-monitoring

Synopsis	Enter the section-monitoring context
Context	configure port <i>port</i> otu section-monitoring
Tree	section-monitoring
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trail-trace-identifier

Synopsis	Enter the trail-trace-identifier context
Context	configure port port otu section-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expected

Synopsis	Enter the expected context
Context	configure port port otu section-monitoring trail-trace-identifier expected
Tree	expected
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-generated

Synopsis	Use the system generated TTl
Context	configure port port otu section-monitoring trail-trace-identifier expected auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bytes *string*

Synopsis	TTl as a sequence of bytes
Context	configure port port otu section-monitoring trail-trace-identifier expected bytes <i>string</i>
Tree	bytes
String length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port <i>port</i> otu section-monitoring trail-trace-identifier expected string <i>string</i>
Tree	string
String length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched TTI
Context	configure port <i>port</i> otu section-monitoring trail-trace-identifier mismatch-reaction <i>keyword</i>
Tree	mismatch-reaction
Options	squelch-rx
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit

Synopsis	Enter the transmit context
Context	configure port <i>port</i> otu section-monitoring trail-trace-identifier transmit
Tree	transmit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-generated

Synopsis	Use the system generated TTI
Context	configure port <i>port</i> otu section-monitoring trail-trace-identifier transmit auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bytes *string*

Synopsis TTI as a sequence of bytes

Context **configure** [port](#) [port](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#) **bytes** *string*

Tree [bytes](#)

String length 0 to 192

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

string *string*

Synopsis TTI as a sequence of printable ASCII

Context **configure** [port](#) [port](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#) **string** *string*

Tree [string](#)

String length 0 to 64

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sf-sd-method *keyword*

Synopsis Method used to determine the SF and SD alarms

Context **configure** [port](#) [port](#) [otu](#) **sf-sd-method** *keyword*

Tree [sf-sd-method](#)

Options fec, bip8

Default fec

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sf-threshold *number*

Synopsis Error rate at which to declare signal fail condition

Context	configure port <i>port</i> otu sf-threshold <i>number</i>
Tree	sf-threshold
Range	3 to 6
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

serial

Synopsis	Enter the serial context
Context	configure port <i>port</i> serial
Tree	serial
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rs232

Synopsis	Enable the rs232 context
Context	configure port <i>port</i> serial rs232
Tree	rs232
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administratively enable/disable the RS-232 port.
Context	configure port <i>port</i> serial rs232 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

channel-group [[ds0-index](#)] *number*

Synopsis	Enter the channel-group list instance
Context	configure port <i>port</i> serial rs232 channel-group <i>number</i>
Tree	channel-group
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ds0-index] *number*

Synopsis	Specifies the DS0 channel group.
Context	configure port <i>port</i> serial rs232 channel-group <i>number</i>
Tree	channel-group
Range	1
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administratively enable/disable the RS232 channel group.
Context	configure port <i>port</i> serial rs232 channel-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Add/remove a text description.
Context	configure port <i>port</i> serial rs232 channel-group <i>number</i> description <i>long-description</i>
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character

Default	DS0GRP
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

character-length *number*

Synopsis	Number of data bits used to transmit a character.
Context	configure port <i>port</i> serial rs232 character-length <i>number</i>
Tree	character-length
Range	6 to 8
Default	8
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

control-lead

Synopsis	Enter the control-lead context
Context	configure port <i>port</i> serial rs232 control-lead
Tree	control-lead
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

input

Synopsis	Enter the input context
Context	configure port <i>port</i> serial rs232 control-lead input
Tree	input
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

dts-dsr *keyword*

Synopsis	Data Terminal Ready (DTR) or Data Set Ready (DSR) input control lead.
Context	configure port <i>port</i> serial rs232 control-lead input dts-dsr <i>keyword</i>
Tree	dts-dsr

Options	high, low
Default	high
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rts-dcd keyword

Synopsis	Request To Send (RTS) or Data Carrier Detect (DCD) input control lead.
Context	configure port <i>port</i> serial rs232 control-lead input rts-dcd <i>keyword</i>
Tree	rts-dcd
Options	high, low, end-to-end
Default	high
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

monitor

Synopsis	Enter the monitor context
Context	configure port <i>port</i> serial rs232 control-lead monitor
Tree	monitor
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

dts-dsr keyword

Synopsis	Data Terminal Ready (DTR) or Data Set Ready (DSR) input control lead monitoring.
Context	configure port <i>port</i> serial rs232 control-lead monitor dts-dsr <i>keyword</i>
Tree	dts-dsr
Options	on, off
Default	off
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rts-dcd keyword

Synopsis	Request To Send (RTS) or Data Carrier Detect (DCD) input control lead monitoring.
Context	configure <i>port port</i> <i>serial rs232 control-lead monitor rts-dcd keyword</i>
Tree	<i>rts-dcd</i>
Options	on, off
Default	off
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

output

Synopsis	Enter the output context
Context	configure <i>port port</i> <i>serial rs232 control-lead output</i>
Tree	<i>output</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

cts-alb keyword

Synopsis	Clear To Send (CTS) or Analog Loopback (ALB) output control lead.
Context	configure <i>port port</i> <i>serial rs232 control-lead output cts-alb keyword</i>
Tree	<i>cts-alb</i>
Options	high, low, end-to-end
Default	high
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

dcd-rts keyword

Synopsis	Data Carrier Detect (DCD) or Request To Send (RTS) output control lead.
Context	configure <i>port port</i> <i>serial rs232 control-lead output dcd-rts keyword</i>
Tree	<i>dcd-rts</i>
Options	high, low, end-to-end
Default	high

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ri-rdl *keyword*

Synopsis	Ring Indicator (RI) or Remote Digital Loopback (RDL) output control lead.
Context	configure port port serial rs232 control-lead output ri-rdl <i>keyword</i>
Tree	ri-rdl
Options	high, low
Default	high
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

data-position *keyword*

Synopsis	HCM data start position.
Context	configure port port serial rs232 data-position <i>keyword</i>
Tree	data-position
Options	f0-b5, f0-b6, none
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hold-time

Synopsis	Enter the hold-time context
Context	configure port port serial rs232 hold-time
Tree	hold-time
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

down *number*

Synopsis	Hold timer for link down event dampening.
Context	configure port port serial rs232 hold-time down <i>number</i>
Tree	down

Range	0 to 100
Units	deciseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

up *number*

Synopsis	Hold timer for link up event dampening.
Context	configure <i>port</i> <i>port</i> <i>serial</i> <i>rs232</i> <i>hold-time</i> <i>up</i> <i>number</i>
Tree	<i>up</i>
Range	0 to 100
Units	deciseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

loopback *keyword*

Synopsis	Activate a loopback on the serial port.
Context	configure <i>port</i> <i>port</i> <i>serial</i> <i>rs232</i> <i>loopback</i> <i>keyword</i>
Tree	<i>loopback</i>
Options	none, <i>bidir-e</i>
Default	none
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mon-data-inactivity

Synopsis	Enter the mon-data-inactivity context
Context	configure <i>port</i> <i>port</i> <i>serial</i> <i>rs232</i> <i>mon-data-inactivity</i>
Tree	<i>mon-data-inactivity</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

clear number

Synopsis	Debounce timer for clearing data inactivity monitoring.
Context	configure <i>port port serial rs232 mon-data-inactivity clear number</i>
Tree	<i>clear</i>
Range	10 20 30 40 50 60 70 80 90 100
Units	seconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

raise number

Synopsis	Debounce timer for raising data inactivity monitoring.
Context	configure <i>port port serial rs232 mon-data-inactivity raise number</i>
Tree	<i>raise</i>
Range	10 20 30 40 50 60 70 80 90 100
Units	seconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

parity keyword

Synopsis	The parity bit in a character.
Context	configure <i>port port serial rs232 parity keyword</i>
Tree	<i>parity</i>
Options	none, odd, even, mark, space
Default	none
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

report-alarm

Synopsis	Enter the report-alarm context
Context	configure <i>port port serial rs232 report-alarm</i>
Tree	<i>report-alarm</i>

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ctrl-lead-mon *boolean*

Synopsis	Enable/disable control lead monitoring alarm.
Context	configure port port serial rs232 report-alarm ctrl-lead-mon <i>boolean</i>
Tree	ctrl-lead-mon
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hcm-oof *boolean*

Synopsis	Enable/disable local HCM oof alarm.
Context	configure port port serial rs232 report-alarm hcm-oof <i>boolean</i>
Tree	hcm-oof
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hcm-rai *boolean*

Synopsis	Enable/disable remote HCM rai alarm.
Context	configure port port serial rs232 report-alarm hcm-rai <i>boolean</i>
Tree	hcm-rai
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mon-data-inact *boolean*

Synopsis	Enable/disable data inactivity monitoring alarm.
Context	configure port port serial rs232 report-alarm mon-data-inact <i>boolean</i>
Tree	mon-data-inact
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

s-bit-signaling *boolean*

Synopsis	S-bit signaling mode.
Context	configure port <i>port</i> serial rs232 s-bit-signaling <i>boolean</i>
Tree	s-bit-signaling
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

socket [[socket-id](#)] *number*

Synopsis	Enter the socket list instance
Context	configure port <i>port</i> serial rs232 socket <i>number</i>
Tree	socket
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[socket-id] *number*

Synopsis	The socket identifier.
Context	configure port <i>port</i> serial rs232 socket <i>number</i>
Tree	socket
Range	1
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administratively enable/disable the RS-232 socket.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Add/remove a text description.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> description <i>long-description</i>
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Default	SOCKET
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rx

Synopsis	Enter the rx context
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx
Tree	rx
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

eop

Synopsis	Enter the eop context
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx eop
Tree	eop
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

idle-timeout *number*

Synopsis	The maximum period of idle time before triggering EOP.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx eop idle-timeout <i>number</i>
Tree	idle-timeout
Range	10 to 5000
Units	milliseconds
Default	50

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

length *number*

Synopsis	The maximum number of received bytes before triggering EOP.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx eop length <i>number</i>
Tree	length
Range	1 to 1500
Units	bytes
Default	1500
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

special-char *string*

Synopsis	A special character value used to trigger EOP.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx eop special-char <i>string</i>
Tree	special-char
String length	3 to 4
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

squelch-delay *number*

Synopsis	The delay before squelch is automatically applied.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx squelch-delay <i>number</i>
Tree	squelch-delay
Range	1 to 120
Units	seconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

unsquelch-delay *number*

Synopsis	The delay before squelch is automatically cleared.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> rx unsquelch-delay <i>number</i>
Tree	unsquelch-delay
Range	1 to 120
Units	seconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tx

Synopsis	Enter the tx context
Context	configure port <i>port</i> serial rs232 socket <i>number</i> tx
Tree	tx
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

inter-session-delay *number*

Synopsis	The delay between sessions.
Context	configure port <i>port</i> serial rs232 socket <i>number</i> tx inter-session-delay <i>number</i>
Tree	inter-session-delay
Range	0 to 5000
Units	milliseconds
Default	10
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

speed *number*

Synopsis	The speed of the serial interface.
Context	configure port <i>port</i> serial rs232 speed <i>number</i>
Tree	speed
Range	600 1200 2400 4800 9600 19200 38400 57600 115200

Default	9600
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

stop-bits *number*

Synopsis	Number of stop bits on the serial interface.
Context	configure port <i>port</i> serial rs232 stop-bits <i>number</i>
Tree	stop-bits
Range	1 to 2
Default	1
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tdm

Synopsis	Enter the tdm context
Context	configure port <i>port</i> tdm
Tree	tdm
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ds1 [[ds1-index](#)] *tdm-ds1-index*

Synopsis	Enter the ds1 list instance
Context	configure port <i>port</i> tdm ds1 <i>tdm-ds1-index</i>
Tree	ds1
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ds1-index] *tdm-ds1-index*

Synopsis	DS-1 channel ID
Context	configure port <i>port</i> tdm ds1 <i>tdm-ds1-index</i>
Tree	ds1

MD-CLI default	physical
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the DS1 channel
Context	configure port port tdm ds1 tdm-ds1-index admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

channel-group [[ds0-index](#)] *number*

Synopsis	Enter the channel-group list instance
Context	configure port port tdm ds1 tdm-ds1-index channel-group <i>number</i>
Tree	channel-group
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ds0-index] *number*

Synopsis	Channel group ID
Context	configure port port tdm ds1 tdm-ds1-index channel-group <i>number</i>
Tree	channel-group
Range	1 to 24
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the DS1 channel group
Context	configure port port tdm ds1 tdm-ds1-index channel-group number admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Text description
Context	configure port port tdm ds1 tdm-ds1-index channel-group number description <i>long-description</i>
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Default	DS0GRP
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

encap-type *keyword***WARNING:**

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

Synopsis	Encapsulation method
Context	configure port port tdm ds1 tdm-ds1-index channel-group number encap-type <i>keyword</i>
Tree	encap-type
Options	cem
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

idle-payload-fill

Synopsis	Enter the idle-payload-fill context
Context	configure port port tdm ds1 tdm-ds1-index channel-group number idle-payload-fill
Tree	idle-payload-fill
Description	<p>Commands in this context configure the data pattern to be transmitted when the circuit emulation service is not operational or temporarily experiences under-run conditions.</p> <p>This command is only valid for CESoPSN and CESoPSN CAS circuit emulation services. It is blocked with a warning for unstructured (SATOP) circuit emulation services.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

all-ones

Synopsis	Transmit 8-bit value to be 11111111
Context	configure port port tdm ds1 tdm-ds1-index channel-group number idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

pattern number

Synopsis	User-defined pattern to be transmitted
Context	configure port port tdm ds1 tdm-ds1-index channel-group number idle-payload-fill pattern number
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

idle-signal-fill

Synopsis	Enter the idle-signal-fill context
Context	configure port port tdm ds1 tdm-ds1-index channel-group number idle-signal-fill
Tree	idle-signal-fill
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

all-ones

Synopsis	Transmit 8-bit value as 11111111
Context	configure port port tdm ds1 tdm-ds1-index channel-group number idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

pattern number

Synopsis	User-defined pattern to be transmitted
Context	configure port port tdm ds1 tdm-ds1-index channel-group number idle-signal-fill pattern number
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

loopback keyword

Synopsis	Loopback on the channel group
Context	configure port port tdm ds1 tdm-ds1-index channel-group number loopback keyword
Tree	loopback
Options	line, internal

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mode *keyword*



WARNING:

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

Synopsis	Operation mode for the TDM channel group
Context	configure port port tdm ds1 tdm-ds1-index channel-group number mode keyword
Tree	mode
Options	access, network
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

network

Synopsis	Enter the network context
Context	configure port port tdm ds1 tdm-ds1-index channel-group number network
Tree	network
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure port port tdm ds1 tdm-ds1-index channel-group number network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port port tdm ds1 tdm-ds1-index channel-group number network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

queue-policy *reference*

Synopsis	Queue policy on the TDM DS0 network channel group
Context	configure port port tdm ds1 tdm-ds1-index channel-group number network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>named-item</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

timeslot *number***WARNING:**

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

Synopsis	Timeslot for the channel group
Context	configure port port tdm ds1 tdm-ds1-index channel-group number timeslot <i>number</i>
Tree	timeslot
Range	1 to 24
Max. instances	24
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

clock-source *keyword***WARNING:**

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

Synopsis	Clock source for data transmission
Context	configure port port tdm ds1 tdm-ds1-index clock-source <i>keyword</i>
Tree	clock-source
Description	This command specifies the clock source to use for the link transmit timing. The options are to use the locally recovered clock from the line's receive data stream, the node central reference, or an adaptively recovered clock using the received packets.
Options	loop-timed, node-timed, adaptive, differential
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

framing *keyword***WARNING:**

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

Synopsis	Framing for the DS1 channel
Context	configure port port tdm ds1 tdm-ds1-index framing <i>keyword</i>
Tree	framing
Options	extended-super-frame, super-frame, ds1-unframed
Default	extended-super-frame
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hold-time

Synopsis	Enter the hold-time context
Context	configure port port tdm ds1 tdm-ds1-index hold-time
Tree	hold-time
Description	Commands in this context configure link dampening timers in 100s of milliseconds. This guards against reporting excessive interface transitions. This is implemented by

not advertising subsequent transitions of the interface to upper layer protocols until the configured timer has expired.

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

down number

Synopsis	Hold timer for link down event dampening on channels
Context	configure port port tdm ds1 tdm-ds1-index hold-time down number
Tree	down
Description	This command configures the DS1/E1 down link dampening timer, which guards against reporting excessive interface transitions. Subsequent transitions of the interface from one state to another are not advertised to upper layer protocols until the configured timer expires.
Range	0 to 100
Units	deciseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

up number

Synopsis	Hold timer for link up event dampening on channels
Context	configure port port tdm ds1 tdm-ds1-index hold-time up number
Tree	up
Description	This command configures the DS1/E1 up link dampening timer, which guards against reporting excessive interface transitions. Subsequent transitions of the interface from one state to another are not advertised to upper layer protocols until the configured timer expires.
Range	0 to 100
Units	deciseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

loopback keyword

Synopsis	Loopback mode for the port
Context	configure port port tdm ds1 tdm-ds1-index loopback <i>keyword</i>
Tree	loopback
Options	line, internal, fdl-ansi, fdl-bellcore, payload-ansi, inband-ansi, inband-bellcore
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port port tdm ds1 tdm-ds1-index report-alarm
Tree	report-alarm
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port port tdm ds1 tdm-ds1-index report-alarm ais <i>boolean</i>
Tree	ais
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port port tdm ds1 tdm-ds1-index report-alarm los <i>boolean</i>
Tree	los
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure <i>port port</i> <i>tdm ds1</i> <i>tdm-ds1-index</i> <i>report-alarm oof</i> <i>boolean</i>
Tree	<i>oof</i>
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure <i>port port</i> <i>tdm ds1</i> <i>tdm-ds1-index</i> <i>report-alarm rai</i> <i>boolean</i>
Tree	<i>rai</i>
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

signal-mode *keyword***WARNING:**

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

Synopsis	Signal mode on the channel
Context	configure <i>port port</i> <i>tdm ds1</i> <i>tdm-ds1-index</i> <i>signal-mode</i> <i>keyword</i>
Tree	<i>signal-mode</i>
Description	This command configures the signal mode on the channel. When enabled, it uses routing information to direct the payload of voice or data to its destination.
Options	channel-associated-signaling
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ssm

Synopsis	Enter the ssm context
Context	configure port port tdm ds1 tdm-ds1-index ssm
Tree	ssm
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state keyword

Synopsis	Enable/disable SSM.
Context	configure port port tdm ds1 tdm-ds1-index ssm admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tx-dus boolean

Synopsis	Enable/disable always transmitting 0xF (dus/dnu) in SSM messaging channel.
Context	configure port port tdm ds1 tdm-ds1-index ssm tx-dus boolean
Tree	tx-dus
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

e1 [e1-index] tdm-e1-index

Synopsis	Enter the e1 list instance
Context	configure port port tdm e1 tdm-e1-index
Tree	e1
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[e1-index] *tdm-e1-index*

Synopsis	E-1 channel
Context	configure port port tdm e1 <i>tdm-e1-index</i>
Tree	e1
MD-CLI default	physical
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the E1 channel
Context	configure port port tdm e1 <i>tdm-e1-index</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

channel-group [[ds0-index](#)] *number*

Synopsis	Enter the channel-group list instance
Context	configure port port tdm e1 <i>tdm-e1-index</i> channel-group <i>number</i>
Tree	channel-group
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[[ds0-index](#)] *number*

Synopsis	DS0 channel group in a channelized DS1 or E1 circuit
Context	configure port port tdm e1 <i>tdm-e1-index</i> channel-group <i>number</i>
Tree	channel-group
Range	1 to 32

Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the E1 channel group
Context	configure port port tdm e1 tdm-e1-index channel-group number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Text description
Context	configure port port tdm e1 tdm-e1-index channel-group number description long-description
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Default	DS0GRP
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

encap-type *keyword***WARNING:**

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

Synopsis	Encapsulation method used on a port, path, or channel
Context	configure port port tdm e1 tdm-e1-index channel-group number encap-type keyword
Tree	encap-type
Options	cem

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

idle-payload-fill

Synopsis	Enter the idle-payload-fill context
Context	configure port port tdm e1 tdm-e1-index channel-group number idle-payload-fill
Tree	idle-payload-fill
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

all-ones

Synopsis	Transmit 8-bit value to be 11111111
Context	configure port port tdm e1 tdm-e1-index channel-group number idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port port tdm e1 tdm-e1-index channel-group number idle-payload-fill pattern <i>number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

idle-signal-fill

Synopsis	Enter the idle-signal-fill context
Context	configure port port tdm e1 tdm-e1-index channel-group number idle-signal-fill

Tree	idle-signal-fill
Description	<p>Commands in this context configure the signaling pattern to be transmitted when the circuit emulation service is not operational or temporarily experiences under-run conditions.</p> <p>This command is only valid for CESoPSN-CAS circuit emulation services. It is blocked with a warning for unstructured (SATOP) and basic CESoPSN circuit emulation services.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

all-ones

Synopsis	Transmit 8-bit value as 11111111
Context	configure port port tdm e1 tdm-e1-index channel-group number idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port port tdm e1 tdm-e1-index channel-group number idle-signal-fill pattern <i>number</i>
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

loopback *keyword*

Synopsis	Loopback mode on the channel group
Context	configure port port tdm e1 tdm-e1-index channel-group number loopback <i>keyword</i>
Tree	loopback
Description	This command configures the specified port or channel in a loopback mode.
Options	line, internal

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mode *keyword*



WARNING:

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

Synopsis	Operation mode
Context	configure port port tdm e1 tdm-e1-index channel-group number mode keyword
Tree	mode
Options	access, network
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

network

Synopsis	Enter the network context
Context	configure port port tdm e1 tdm-e1-index channel-group number network
Tree	network
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure port port tdm e1 tdm-e1-index channel-group number network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port port tdm e1 tdm-e1-index channel-group number network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

queue-policy *reference*

Synopsis	Network queue policy on TDM E0 network channel group
Context	configure port port tdm e1 tdm-e1-index channel-group number network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>named-item</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

timeslot *number***WARNING:**

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

Synopsis	Timeslot list for the channel group
Context	configure port port tdm e1 tdm-e1-index channel-group number timeslot <i>number</i>
Tree	timeslot
Description	<p>This command configures the list of timeslots to be used in a channel group.</p> <p>For the list of DS-0 timeslots to be used in the DS-1 or E1 channel-group, the timeslots are defaulted as defined by the encapsulation type. ATM channel groups do not allow timeslots to change.</p>
Range	1 to 32
Max. instances	32
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

clock-source *keyword*



WARNING:

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

Synopsis	Clock source for data transmission
Context	configure port port tdm e1 tdm-e1-index clock-source <i>keyword</i>
Tree	clock-source
Description	This command specifies the clock source to use for the link transmit timing. The options are to use the locally recovered clock from the line's receive data stream, the node central reference, or an adaptively recovered clock using the received packets.
Options	loop-timed, node-timed, adaptive, differential
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

framing *keyword*



WARNING:

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

Synopsis	Framing on the E1 channel
Context	configure port port tdm e1 tdm-e1-index framing <i>keyword</i>
Tree	framing
Description	This command specifies the E1 framing to use with the associated channel.
Options	no-crc-g704, g704, e1-unframed
Default	g704
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hold-time

Synopsis	Enter the hold-time context
Context	configure port port tdm e1 tdm-e1-index hold-time

Tree	hold-time
Description	Commands in this context configure link dampening timers in 100s of milliseconds. This guards against reporting excessive interface transitions. This is implemented by not advertising subsequent transitions of the interface to upper layer protocols until the configured timer has expired.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

down number

Synopsis	Hold timer for link down event dampening on channels
Context	configure port port tdm e1 tdm-e1-index hold-time down number
Tree	down
Description	This command configures the DS1/E1 down link dampening timer, which guards against reporting excessive interface transitions. Subsequent transitions of the interface from one state to another are not advertised to upper layer protocols until the configured timer expires.
Range	0 to 100
Units	deciseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

up number

Synopsis	Hold timer for link up event dampening on channels
Context	configure port port tdm e1 tdm-e1-index hold-time up number
Tree	up
Description	This command configures the DS1/E1 up link dampening timer, which guards against reporting excessive interface transitions. Subsequent transitions of the interface from one state to another are not advertised to upper layer protocols until the configured timer expires.
Range	0 to 100
Units	deciseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

loopback *keyword*

Synopsis	Loopback mode
Context	configure port port tdm e1 tdm-e1-index loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port port tdm e1 tdm-e1-index report-alarm
Tree	report-alarm
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port port tdm e1 tdm-e1-index report-alarm ais <i>boolean</i>
Tree	ais
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port port tdm e1 tdm-e1-index report-alarm los <i>boolean</i>
Tree	los
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure <i>port port tdm e1 tdm-e1-index report-alarm oof boolean</i>
Tree	<i>oof</i>
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure <i>port port tdm e1 tdm-e1-index report-alarm rai boolean</i>
Tree	<i>rai</i>
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

signal-mode *keyword***WARNING:**

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

Synopsis	Signal mode on the channel
Context	configure <i>port port tdm e1 tdm-e1-index signal-mode keyword</i>
Tree	<i>signal-mode</i>
Description	This command configures the signal mode on the channel. When enabled, it uses routing information to direct the payload of voice or data to its destination.
Options	channel-associated-signaling
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ssm

Synopsis	Enter the ssm context
Context	configure <i>port port</i> <i>tdm e1</i> <i>tdm-e1-index</i> ssm
Tree	ssm
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Enable/disable SSM.
Context	configure <i>port port</i> <i>tdm e1</i> <i>tdm-e1-index</i> ssm admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ssm-bit *number*

Synopsis	The sa-bit to use for conveying SSM information
Context	configure <i>port port</i> <i>tdm e1</i> <i>tdm-e1-index</i> ssm ssm-bit <i>number</i>
Tree	ssm-bit
Range	4 to 8
Default	8
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tx-dus *boolean*

Synopsis	Enable/disable always transmitting 0xF (dus/dnu) in SSM messaging channel.
Context	configure <i>port port</i> <i>tdm e1</i> <i>tdm-e1-index</i> ssm tx-dus <i>boolean</i>
Tree	tx-dus
Default	false
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

encoding *keyword*

Synopsis Encoding for the physical DS1/E1 port

Context **configure** *port* *port* *tdm* *encoding* *keyword*

Tree *encoding*

Description This command configures the encoding for the physical DS1 or E1 port.

Use **b8zs** to specify that B8ZS (bipolar with eight-zero substitution) zero code suppression is used on the port (supported only on a DS1 port).

Use **ami** to specify that AMI (alternate mark inversion) is used on the port (supported only on a DS1 port).

Use **hdb3** to specify that HDB3 (high-density bipolar of order 3) is used on the port (supported only on an E1 port).

Options b8zs, ami, hdb3

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

length *number*

Synopsis Cable length for short buildout on a physical DS1 port

Context **configure** *port* *port* *tdm* *length* *number*

Tree *length*

Range 133 | 266 | 399 | 533 | 655

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

line-impedance *number*

Synopsis Line impedance for the physical DS1/E1 port

Context **configure** *port* *port* *tdm* *line-impedance* *number*

Tree *line-impedance*

Description This command configures the line impedance of a port. Line impedance is set on a per-port basis, and ports on the same card can have different values. Before changing the line impedance of a port, the port must be shut down.

DS1 ports support only 100 ohms. E1 ports support 75 and 120 ohms.

Range 75 | 100 | 120

Units	ohms
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tpif

Synopsis	Enable the tpif context
Context	configure port port tdm tpif
Tree	tpif
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administratively enable/disable the TPIF channel group.
Context	configure port port tdm tpif admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

channel-group [[ds0-index](#)] *number*

Synopsis	Enter the channel-group list instance
Context	configure port port tdm tpif channel-group <i>number</i>
Tree	channel-group
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[[ds0-index](#)] *number*

Synopsis	Specifies the DS0 channel group.
Context	configure port port tdm tpif channel-group <i>number</i>
Tree	channel-group

Range	1
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administratively enable/disable the TPIF channel group.
Context	configure <i>port port tdm tpif channel-group number admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Add/remove a text description.
Context	configure <i>port port tdm tpif channel-group number description long-description</i>
Tree	<i>description</i>
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Default	DS0GRP
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

timeslot *number*



WARNING:

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

Synopsis	Configure timeslot for this channel group.
Context	configure <i>port port tdm tpif channel-group number timeslot number</i>
Tree	<i>timeslot</i>

Range	1 to 12
Max. instances	12
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

loopback *keyword*

Synopsis	Activate a loopback on the channel.
Context	configure port port tdm tpif loopback <i>keyword</i>
Tree	loopback
Options	internal, line
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port port tdm tpif report-alarm
Tree	report-alarm
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

los *boolean*

Synopsis	Enable/disable los alarm.
Context	configure port port tdm tpif report-alarm los <i>boolean</i>
Tree	los
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rai *boolean*

Synopsis	Enable/disable rai alarm.
----------	---------------------------

Context	configure port port tdm tpif report-alarm rai boolean
Tree	rai
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

transceiver

Synopsis	Enter the transceiver context
Context	configure port port transceiver
Tree	transceiver
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

digital-coherent-optics *boolean*

Synopsis	Enable digital coherent optics module for transceiver
Context	configure port port transceiver digital-coherent-optics boolean
Tree	digital-coherent-optics
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

optical-line-system

Synopsis	Enable the optical-line-system context
Context	configure port port transceiver optical-line-system
Tree	optical-line-system
Description	Commands in this context configure the QSFP-LS pluggable optical line system, used in conjunction with 400G ZR/ZR+ coherent pluggable modules.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-amplifier-gain *decimal-number*

Synopsis	Gain for the egress amplifier
Context	configure port <i>port</i> transceiver optical-line-system egress-amplifier-gain <i>decimal-number</i>
Tree	egress-amplifier-gain
Range	0.00 to 25.00
Units	decibels
Default	25.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.20 port-xc commands

```
configure
- port-xc
- apply-groups reference
- apply-groups-exclude reference
- pxc number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description description
- port-id reference
```


4.20.1 port-xc command descriptions

port-xc

Synopsis	Enter the port-xc context
Context	configure port-xc
Tree	port-xc
Description	Commands in this context configure port cross-connect (PXC) functionality.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pxc [**pxc-id**] *number*

Synopsis	Enter the pxc list instance
Context	configure port-xc pxc <i>number</i>
Tree	pxc
Description	Commands in this context configure port cross-connect (PXC) information.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**pxc-id**] *number*

Synopsis	PXC ID
Context	configure port-xc pxc <i>number</i>
Tree	pxc
Range	1 to 256
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the PXC
Context	configure port-xc pxc <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure port-xc pxc number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id *reference*

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

Synopsis	PXC port ID
Context	configure port-xc pxc number port-id <i>reference</i>
Tree	port-id
Reference	configure port <i>port</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.21 python commands

```
configure
- python
  - apply-groups reference
  - apply-groups-exclude reference
  - python-script named-item
    - action-on-fail keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - protection
      - hmac-sha256 encrypted-leaf
    - run-as-user named-item
    - urls url
    - version keyword
```

4.21.1 python command descriptions

python

Synopsis	Enter the python context
Context	configure python
Tree	python
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python-script [name] *named-item*

Synopsis	Enter the python-script list instance
Context	configure python python-script <i>named-item</i>
Tree	python-script
Description	Commands in this context configure Python scripts to modify messages of different protocols.
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Python script policy name
Context	configure python python-script <i>named-item</i>
Tree	python-script
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action-on-fail *keyword*

Synopsis	Action taken when the Python execution fails
Context	configure python python-script <i>named-item</i> action-on-fail <i>keyword</i>
Tree	action-on-fail
Options	passthrough, drop
Default	drop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Python script
Context	configure python python-script <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure python python-script <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protection

Synopsis	Enter the protection context
Context	configure python python-script <i>named-item</i> protection
Tree	protection

Description	Commands in this context configure the format of the Python script file or files in this Python script. Unintentional changing of Python script file can be prevented by using the protected format.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hmac-sha256 *encrypted-leaf*

Synopsis	Hash value to include as first line in Python script
Context	configure python python-script <i>named-item</i> protection hmac-sha256 <i>encrypted-leaf</i>
Tree	hmac-sha256
String length	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

run-as-user *named-item*

Synopsis	Local user authenticated for scripts
Context	configure python python-script <i>named-item</i> run-as-user <i>named-item</i>
Tree	run-as-user
Description	<p>This command configures a user that is different from the current user of the session. Script authentication, authorization, accounting, and any activity within the script, is run as the specified user.</p> <p>This user must be locally configured and script authorization will use the user's local AAA profile even if remote authorization is configured.</p> <p>If this command is not configured, the current user of the session is used.</p>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

urls *url*

Synopsis	Script location in URL format
Context	configure python python-script <i>named-item</i> urls <i>url</i>
Tree	urls

String length	1 to 180
Max. instances	3
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*



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

Synopsis	Python version the script is written for
Context	configure <i>python</i> <i>python-script</i> <i>named-item</i> <i>version</i> <i>keyword</i>
Tree	<i>version</i>
Options	python2, python3
Default	python2
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

4.22 qos commands

```

configure
- qos
  - apply-groups reference
  - apply-groups-exclude reference
  - match-list
    - ip-prefix-list named-item
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - prefix ipv4-prefix
    - ipv6-prefix-list named-item
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - prefix ipv6-prefix
  - md-auto-id
    - qos-policy-id-range
      - apply-groups reference
      - apply-groups-exclude reference
      - end number
      - start number
  - network network-policy-name
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - egress
      - dscp keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - fc keyword
        - profile keyword
      - fc keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - de-mark
          - force number
        - dot1p-in-profile number
        - dot1p-out-profile number
        - dscp-in-profile keyword
        - dscp-out-profile keyword
        - lsp-exp-in-profile number
        - lsp-exp-out-profile number
      - port-redirect-group
        - policer number
        - queue number
  - ip-criteria
    - entry number
      - action
        - fc keyword
        - port-redirect-group
          - policer number
          - queue number
        - profile keyword
        - type keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - match
        - dscp keyword

```


configure qos network egress ip-criteria entry match dst-ip

```

- dst-ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)
  - mask ipv4-address
- dst-port
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- fragment keyword
- icmp-type number
- protocol (number | keyword)
- src-ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)
  - mask ipv4-address
- src-port
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- ipv6-criteria
  - entry number
    - action
      - fc keyword
      - port-redirect-group
        - policer number
        - queue number
      - profile keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - match
      - dscp keyword
      - dst-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - mask ipv6-address
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
      - icmp-type number
      - next-header (number | keyword)
      - src-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - mask ipv6-address
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
    - prec number
      - apply-groups reference
      - apply-groups-exclude reference
      - fc keyword

```

configure qos network egress prec profile

- **profile** *keyword*
 - **remark-trusted**
 - **force-egress-marking** *boolean*
- **ingress**
 - **default-action**
 - **fc** *keyword*
 - **profile** *keyword*
 - **dot1p** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **fp-redirect-group**
 - **broadcast-policer** *number*
 - **multicast-policer** *number*
 - **policer** *number*
 - **unknown-policer** *number*
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **profile** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *ipv4-address*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **protocol** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *ipv4-address*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **ipv6-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*

configure qos network ingress ipv6-criteria entry action profile

```

    - profile keyword
    - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - match
      - dscp keyword
      - dst-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - ipv6-prefix-list reference
        - mask ipv6-address
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
    - next-header (number | keyword)
    - src-ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)
      - ipv6-prefix-list reference
      - mask ipv6-address
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - ter-use-dscp boolean
    - lsp-exp number
      - apply-groups reference
      - apply-groups-exclude reference
      - fc keyword
      - profile keyword
    - policy-id number
    - scope keyword
  - network-queue named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - multicast-queue reference
    - queue reference
    - queue number
      - apply-groups reference
      - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - cbs decimal-number
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs decimal-number
    - multipoint boolean
    - port-parent
      - cir-level number
      - cir-weight number
      - level number
      - weight number
    - queue-type keyword

```

configure qos network-queue queue rate

- **rate**
 - **cir** *number*
 - **pir** *number*
- **policer-control-policy** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **root**
 - **max-percent-rate** *decimal-number*
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fixed-mbs** *boolean*
 - **mbs-contribution** (*number* | *keyword*)
 - **profile-preferred** *boolean*
- **tier** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter-parent**
 - **arbiter-name** *named-item*
 - **level** *number*
 - **weight** *number*
 - **description** *description*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **reference-rate** *keyword*
- **port-scheduler-policy** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-threshold** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **weight** *number*
- **max-rate** (*number* | *keyword*)
- **monitor-threshold** *number*
- **orphan-overrides**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
- **pre-classifier-policy** *named-item-64*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-policer-id** *number*
 - **description** *description*
 - **policer** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dot1p** *number*
 - **mbs** *number*
 - **pir** *number*
- **queue-group-templates**
 - **apply-groups** *reference*

configure qos queue-group-templates apply-groups-exclude

```

- apply-groups-exclude reference
- egress
  - apply-groups reference
  - apply-groups-exclude reference
  - queue-group named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - description description-or-empty
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - queue
        - none
        - queue-id reference
  - policer number
    - apply-groups reference
    - apply-groups-exclude reference
    - arbiter-parent
      - arbiter-name named-item
      - level number
      - weight number
    - cbs (number | keyword)
    - description description
    - exceed-pir boolean
    - high-prio-only (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
      - reference-rate keyword
    - profile-capped boolean
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue number
    - apply-groups reference
    - apply-groups-exclude reference
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - drop-tail
      - exceed
        - percent-reduction-from-mbs (number | keyword)
      - high
        - percent-reduction-from-mbs (number | keyword)
      - highplus
        - percent-reduction-from-mbs (number | keyword)
      - low
        - percent-reduction-from-mbs (number | keyword)
    - dynamic-mbs boolean
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
      - reference-rate keyword
    - port-parent
      - cir-level number
      - cir-weight number
      - level number
      - weight number
    - queue-delay number
    - queue-type keyword

```

configure qos queue-group-templates egress queue-group queue rate

```

- rate
  - cir (number | keyword)
  - pir (number | keyword)
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name named-item
  - weight number
- wred-queue
  - mode keyword
  - usage keyword
- ingress
  - apply-groups reference
  - apply-groups-exclude reference
  - queue-group named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - policer number
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - arbiter-parent
        - arbiter-name named-item
        - level number
        - weight number
      - cbs (number | keyword)
      - description description
      - high-prio-only (number | keyword)
      - mbs (number | keyword)
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - profile-capped boolean
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue number
      - apply-groups reference
      - apply-groups-exclude reference
      - burst-limit (number | keyword)
      - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - mbs (number | keyword)
      - multipoint boolean
      - packet-byte-offset number
      - queue-mode keyword
      - queue-type keyword
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
        - police
      - scheduler-parent
        - cir-level number
        - cir-weight number
        - level number
        - scheduler-name named-item

```

configure qos queue-group-templates ingress queue-group queue scheduler-parent weight

- **weight** *number*
- **sap-egress** *qos-policy-name*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *description*
- **dot1p** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **ethernet-ctag** *boolean*
- **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **de-mark**
 - **force** *number*
 - **de-mark-inner**
 - **force** *number*
 - **de-mark-outer**
 - **force** *number*
 - **dot1p**
 - **exceed-profile** *number*
 - **in-profile** *number*
 - **out-profile** *number*
 - **dot1p-inner**
 - **in-profile** *number*
 - **out-profile** *number*
 - **dot1p-outer**
 - **exceed-profile** *number*
 - **in-profile** *number*
 - **out-profile** *number*
 - **dscp**
 - **exceed-profile** *keyword*
 - **in-profile** *keyword*
 - **out-profile** *keyword*
 - **policer** *reference*
 - **port-redirect-group-queue**
 - **queue** *number*
 - **prec**
 - **exceed-profile** *number*
 - **in-profile** *number*
 - **out-profile** *number*
 - **queue** *reference*
 - **queue-group-queue**
 - **instance** *number*
 - **queue** *reference*
 - **queue-group-name** *reference*
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **policer** *reference*
 - **port-redirect-group-queue** *boolean*
 - **profile** *keyword*
 - **queue** *number*
 - **type** *keyword*
 - **use-fc-mapped-queue** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure qos sap-egress ip-criteria entry description

```

- description description
- match
  - dscp keyword
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask ipv4-address
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask ipv4-address
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
- ipv6-criteria
  - entry number
    - action
      - fc keyword
      - policer reference
      - port-redirect-group-queue boolean
      - profile keyword
      - queue number
      - type keyword
      - use-fc-mapped-queue boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - match
      - dscp keyword
      - dst-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - mask ipv6-address
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - next-header (number | keyword)
      - src-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - mask ipv6-address
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
    - parent-location keyword

```


configure qos sap-egress policer

```

- policer number
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- arbiter-parent
  - arbiter-name named-item
  - level number
  - weight number
- cbs (number | keyword)
- description description
- dscp-prec-remarking boolean
- exceed-pir boolean
- high-prio-only (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
  - reference-rate keyword
- port-parent
  - cir-level number
  - cir-weight number
  - level number
  - weight number
- profile-capped boolean
- profile-out-preserve boolean
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name named-item
  - weight number
- stat-mode keyword
- policy-id number
- prec number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc keyword
  - profile keyword
- queue number
  - apply-groups reference
  - apply-groups-exclude reference
  - avg-frame-overhead decimal-number
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - exceed
      - percent-reduction-from-mbs (number | keyword)
    - high
      - percent-reduction-from-mbs (number | keyword)
    - highplus
      - percent-reduction-from-mbs (number | keyword)
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - pir decimal-number

```

configure qos sap-egress queue percent-rate reference-rate

- **reference-rate** *keyword*
- **port-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
- **queue-type** *keyword*
- **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *named-item*
 - **weight** *number*
- **wred-queue**
 - **mode** *keyword*
 - **usage** *keyword*
- **scope** *keyword*
- **sap-ingress** *qos-policy-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-fc** *sap-ingress-fc-name*
 - **default-priority** *keyword*
 - **description** *description*
 - **dot1p** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *sap-ingress-fc-name*
 - **priority** *keyword*
- **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *sap-ingress-fc-name*
 - **priority** *keyword*
- **fc** *sap-ingress-fc-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast-policer** *number*
 - **broadcast-queue** *reference*
 - **broadcast-queue-group-queue**
 - **queue** *reference*
 - **queue-group-name** *reference*
 - **de-l-out-profile** *boolean*
 - **egress-fc** *keyword*
 - **fp-redirect-group-broadcast-policer**
 - **fp-redirect-group-multicast-policer**
 - **fp-redirect-group-policer**
 - **fp-redirect-group-unknown-policer**
 - **in-remark**
 - **dscp** *keyword*
 - **prec** *number*
 - **multicast-policer** *number*
 - **multicast-queue** *reference*
 - **multicast-queue-group-queue**
 - **queue** *reference*
 - **queue-group-name** *reference*
- **out-remark**
 - **dscp** *keyword*
 - **prec** *number*
- **policer** *number*
- **profile** *keyword*
- **queue** *reference*

configure qos sap-ingress fc queue-group-queue

- **queue-group-queue**
 - **queue** *reference*
 - **queue-group-name** *reference*
- **unknown-policer** *number*
- **unknown-queue** *reference*
- **unknown-queue-group-queue**
 - **queue** *reference*
 - **queue-group-name** *reference*
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *sap-ingress-fc-name*
 - **priority** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *ipv4-address*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **protocol** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *ipv4-address*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
- **ipv6-criteria**
 - **entry** *number*
 - **action**
 - **fc** *sap-ingress-fc-name*
 - **priority** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **mask** *ipv6-address*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*

configure qos sap-ingress ipv6-criteria entry match fragment

```

- fragment keyword
- next-header (number | keyword)
- src-ip
-   address (ipv6-prefix-with-host-bits | ipv6-address)
-   mask ipv6-address
- src-port
-   eq number
-   gt number
-   lt number
-   range
-     end number
-     start number
- mac-criteria
-   entry number
-     action
-       fc sap-ingress-fc-name
-       priority keyword
-       type keyword
-     apply-groups reference
-     apply-groups-exclude reference
-     description description
-     match
-       dot1p
-         mask number
-         priority number
-       dst-mac
-         address mac-address
-         mask mac-address
-       etype etype-value
-       frame-type keyword
-       inner-tag
-         mask number
-         vlan number
-       llc-dsap
-         dsap number
-         mask number
-       llc-ssap
-         mask number
-         ssap number
-       outer-tag
-         mask number
-         vlan number
-       snap-oui keyword
-       snap-pid number
-       src-mac
-         address mac-address
-         mask mac-address
-     type keyword
-   policer number
-     apply-groups reference
-     apply-groups-exclude reference
-     arbiter-parent
-       arbiter-name named-item
-       level number
-       weight number
-     cbs (number | keyword)
-     description description
-     high-prio-only (number | keyword)
-     mbs (number | keyword)
-     packet-byte-offset number
-     percent-rate
-       cir decimal-number
-       pir decimal-number
-       reference-rate keyword

```

configure qos sap-ingress policer profile-capped

```

- profile-capped boolean
- rate
  - cir (number | keyword)
  - pir (number | keyword)
  - stat-mode keyword
- policy-id number
- prec number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc sap-ingress-fc-name
  - priority keyword
- queue number
  - apply-groups reference
  - apply-groups-exclude reference
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - multipoint boolean
  - packet-byte-offset number
  - percent-rate
    - cir decimal-number
    - fir decimal-number
    - pir decimal-number
    - police
      - reference-rate keyword
  - queue-mode keyword
  - queue-type keyword
  - rate
    - cir (number | keyword)
    - fir (number | keyword)
    - pir (number | keyword)
    - police
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name named-item
    - weight number
  - scope keyword
- scheduler-policy named-item
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - frame-based-accounting boolean
  - tier number
    - apply-groups reference
    - apply-groups-exclude reference
    - parent-location keyword
    - scheduler named-item
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - limit-unused-bandwidth boolean
      - percent-rate
        - cir (keyword | decimal-number)
        - pir decimal-number
        - reference-rate keyword
    - port-parent
      - cir-level number
      - cir-weight number
      - level number

```

configure qos scheduler-policy tier scheduler port-parent weight

- **weight** *number*
- **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *named-item*
 - **weight** *number*

4.22.1 qos command descriptions

qos

Synopsis	Enter the qos context
Context	configure qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match-list

Synopsis	Enter the match-list context
Context	configure qos match-list
Tree	match-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list [[prefix-list-name](#)] *named-item*

Synopsis	Enter the ip-prefix-list list instance
Context	configure qos match-list ip-prefix-list <i>named-item</i>
Tree	ip-prefix-list
Max. instances	512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[prefix-list-name\]](#) *named-item*

Synopsis	IP prefix list name
Context	configure qos match-list ip-prefix-list <i>named-item</i>
Tree	ip-prefix-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos match-list ip-prefix-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] *ipv4-prefix*

Synopsis	Add a list entry for prefix
Context	configure qos match-list ip-prefix-list <i>named-item</i> prefix <i>ipv4-prefix</i>
Tree	prefix
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] *ipv4-prefix*

Synopsis	IPv4 address prefix
Context	configure qos match-list ip-prefix-list <i>named-item</i> prefix <i>ipv4-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list [[prefix-list-name](#)] *named-item*

Synopsis	Enter the ipv6-prefix-list list instance
Context	configure qos match-list ipv6-prefix-list <i>named-item</i>
Tree	ipv6-prefix-list
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-list-name] *named-item*

Synopsis	IP prefix list name
Context	configure qos match-list ipv6-prefix-list <i>named-item</i>
Tree	ipv6-prefix-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos match-list ipv6-prefix-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ipv6-prefix](#)] *ipv6-prefix*

Synopsis	Add a list entry for prefix
Context	configure qos match-list ipv6-prefix-list <i>named-item</i> prefix <i>ipv6-prefix</i>

Tree	prefix
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	Ipv6 address prefix
Context	configure qos match-list ipv6-prefix-list <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure qos md-auto-id
Tree	md-auto-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos-policy-id-range

Synopsis	Enable the qos-policy-id-range context
Context	configure qos md-auto-id qos-policy-id-range
Tree	qos-policy-id-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

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

Synopsis	Upper bound of the ID range
Context	configure qos md-auto-id qos-policy-id-range end <i>number</i>
Tree	end
Range	2 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

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

Synopsis	Lower bound of the ID range
Context	configure qos md-auto-id qos-policy-id-range start <i>number</i>
Tree	start
Range	2 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network [network-policy-name] *network-policy-name*

Synopsis	Enter the network list instance
Context	configure qos network <i>network-policy-name</i>
Tree	network
Max. instances	255
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[network-policy-name] *network-policy-name*

Synopsis QoS network policy name
Context **configure** qos network *network-policy-name*
Tree [network](#)
String length 1 to 64
String format 'network-policy-name' must contain at least one non-space character
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** qos network *network-policy-name* [description](#) *description*
Tree [description](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

egress

Synopsis Enter the **egress** context
Context **configure** qos network *network-policy-name* [egress](#)
Tree [egress](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

dscp [[dscp-name](#)] *keyword*

Synopsis Enter the **dscp** list instance
Context **configure** qos network *network-policy-name* [egress](#) [dscp](#) *keyword*

Tree	dscp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dscp-name] keyword

Synopsis	DSCP name to perform reclassification actions
Context	configure qos network <i>network-policy-name</i> egress dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> egress dscp <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile keyword

Synopsis	Default profile to use for the ingressing traffic
----------	---

Context	configure qos network <i>network-policy-name</i> egress dscp <i>keyword</i> profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i>
Tree	fc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

de-mark

Synopsis	Enable the de-mark context
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> de-mark
Tree	de-mark

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force number

Synopsis	DE value
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword de-mark force number</i>
Tree	force
Range	0 to 1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p-in-profile number

Synopsis	Dot1p marking for in-profile marking
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword dot1p-in-profile number</i>
Tree	dot1p-in-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p-out-profile number

Synopsis	Dot1p marking for out-of-profile marking
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword dot1p-out-profile number</i>
Tree	dot1p-out-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp-in-profile keyword

Synopsis	DSCP marking for in-profile marking
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword dscp-in-profile keyword</i>
Tree	dscp-in-profile

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp-out-profile *keyword*

Synopsis	DSCP marking for out-of-profile marking
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> dscp-out-profile <i>keyword</i>
Tree	dscp-out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-exp-in-profile *number*

Synopsis	LSP-EXP marking for in-profile marking
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> lsp-exp-in-profile <i>number</i>
Tree	lsp-exp-in-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-exp-out-profile *number*

Synopsis	LSP-EXP marking for out-of-profile marking
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> lsp-exp-out-profile <i>number</i>
Tree	lsp-exp-out-profile
Range	0 to 7

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer *number*

Synopsis	Policer to be used
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> port-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *number*

Synopsis	Queue to be used
Context	configure qos network <i>network-policy-name</i> egress fc <i>keyword</i> port-redirect-group queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria
Tree	ip-criteria

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure <i>qos network network-policy-name egress ip-criteria entry number</i>
Tree	<i>entry</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	configure <i>qos network network-policy-name egress ip-criteria entry number</i>
Tree	<i>entry</i>
Description	<p>This command uniquely identifies a match criterion and the corresponding action.</p> <p>Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.</p>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure <i>qos network network-policy-name egress ip-criteria entry number action</i>
Tree	<i>action</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class
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Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> action port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer *number*

Synopsis	Policer ID to be used for the matched traffic
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> action port-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *number*

Synopsis	Queue to be used for post-policed traffic
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> action port-redirect-group queue <i>number</i>
Tree	queue

Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Profile reclassification action
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> action <i>profile keyword</i>
Tree	<i>profile</i>
Options	in, out, exceed, inplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> action <i>type keyword</i>
Tree	<i>type</i>
Options	ignore-match, accept
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> <i>description description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address

String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	Subnet mask
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match dst-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gt *number*

Synopsis Value 'greater than' assigned as match condition

Context **configure** [qos network](#) *network-policy-name* [egress ip-criteria entry](#) *number* [match dst-port](#) **gt** *number*

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Value 'less than' assigned as match condition

Context **configure** [qos network](#) *network-policy-name* [egress ip-criteria entry](#) *number* [match dst-port](#) **lt** *number*

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enter the **range** context

Context **configure** [qos network](#) *network-policy-name* [egress ip-criteria entry](#) *number* [match dst-port](#) **range**

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Description	<p>This command configures fragmented or non-fragmented IP packets as a network QoS policy match criterion.</p> <p>When unconfigured, all packets match regardless of whether they are fragmented.</p>
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-type number

Synopsis	ICMP type in the ICMP header of IPv4 packet to match
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Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match icmp-type <i>number</i>
Tree	icmp-type
Description	<p>This command configures matching on the ICMP type field in the ICMP header of an IPv4 packet as a network QoS match criterion.</p> <p>An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.</p>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	Subnet mask
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' assigned as match condition
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Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry <i>number</i> match src-port range
Tree	range

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>network-policy-name</i> egress ip-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria
Tree	ipv6-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry number

Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] number

Synopsis	Entry ID for match criterion and corresponding action
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i>
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority)

	h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer *number*

Synopsis	Policer ID to be used for the matched traffic
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action port-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *number*

Synopsis	Queue to be used for post-policed traffic
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action port-redirect-group queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Profile reclassification action
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Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action <i>profile</i> keyword
Tree	profile
Options	in, out, exceed, inplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Action for criteria entry
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> action <i>type</i> keyword
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> <i>description</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address to match
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	Address mask
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Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>dst-ip</i> mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>dst-port</i>
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>dst-port</i> eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>dst-port</i> gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Value 'less than' assigned as match condition

Context **configure** [qos network](#) *network-policy-name* [egress ipv6-criteria entry](#) *number match* [dst-port lt](#) *number*

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enter the **range** context

Context **configure** [qos network](#) *network-policy-name* [egress ipv6-criteria entry](#) *number match* [dst-port range](#)

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end *number*

Synopsis Upper bound of port range to match

Context **configure** [qos network](#) *network-policy-name* [egress ipv6-criteria entry](#) *number match* [dst-port range end](#) *number*

Tree [end](#)

Range 0 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start *number*

Synopsis Lower bound of port range to match

Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>dst-port range start number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>fragment keyword</i>
Tree	fragment
Description	This command configures fragmented or non-fragmented IPv6 packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true, first-only, non-first-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-type number

Synopsis	ICMPv6 type in ICMPv6 header of IPv6 packet to match
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>icmp-type number</i>
Tree	icmp-type
Description	This command configures matching on the ICMPv6 type field in the ICMPv6 header of an IPv6 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address to match
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	Address mask
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Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>src-ip</i> mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>src-port</i>
Tree	<i>src-port</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>src-port</i> eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>src-port</i> gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Value 'less than' assigned as match condition

Context **configure** [qos network](#) *network-policy-name* [egress ipv6-criteria entry](#) *number match src-port lt number*

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enter the **range** context

Context **configure** [qos network](#) *network-policy-name* [egress ipv6-criteria entry](#) *number match src-port range*

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end *number*

Synopsis Upper bound of port range to match

Context **configure** [qos network](#) *network-policy-name* [egress ipv6-criteria entry](#) *number match src-port range end number*

Tree [end](#)

Range 0 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start *number*

Synopsis Lower bound of port range to match

Context	configure qos network <i>network-policy-name</i> egress ipv6-criteria entry <i>number</i> match <i>src-port range start number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prec [*prec-value*] *number*

Synopsis	Enter the prec list instance
Context	configure qos network <i>network-policy-name</i> egress prec <i>number</i>
Tree	prec
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prec-value] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos network <i>network-policy-name</i> egress prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> egress prec <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority)

	nc – Network Control (high priority)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	configure qos network <i>network-policy-name</i> egress prec number profile keyword
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remark-trusted

Synopsis	Enable the remark-trusted context
Context	configure qos network <i>network-policy-name</i> egress remark-trusted
Tree	remark-trusted
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-egress-marking *boolean*

Synopsis	Remark DSCP bits in the internal IP header
Context	configure qos network <i>network-policy-name</i> egress remark-trusted force-egress-marking <i>boolean</i>
Tree	force-egress-marking
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure qos network <i>network-policy-name</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action

Synopsis	Enter the default-action context
Context	configure qos network <i>network-policy-name</i> ingress default-action
Tree	default-action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class used when classifying ingress traffic
Context	configure qos network <i>network-policy-name</i> ingress default-action fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	be
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile keyword

Synopsis	Default profile for the ingressing traffic
Context	configure qos network <i>network-policy-name</i> ingress default-action profile <i>keyword</i>

Tree	profile
Options	in, out, exceed, inplus
Default	out
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p [[dot1p-value](#)] *number*

Synopsis	Enter the dot1p list instance
Context	configure qos network <i>network-policy-name</i> ingress dot1p <i>number</i>
Tree	dot1p
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos network <i>network-policy-name</i> ingress dot1p <i>number</i>
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> ingress dot1p <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Default profile to be used for the ingressing traffic
Context	configure qos network <i>network-policy-name</i> ingress dot1p number profile <i>keyword</i>
Tree	profile
Options	in, out, de, exceed, inplus
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp [[dscp-name](#)] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos network <i>network-policy-name</i> ingress dscp <i>keyword</i>
Tree	dscp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dscp-name] *keyword*

Synopsis	DSCP associated with the forwarding class
Context	configure qos network <i>network-policy-name</i> ingress dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> ingress dscp keyword fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile keyword

Synopsis	Default profile to use for the ingressing traffic
Context	configure qos network <i>network-policy-name</i> ingress dscp keyword profile keyword
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [[fc-name](#)] keyword

Synopsis	Enter the fc list instance
Context	configure qos network <i>network-policy-name</i> ingress fc keyword
Tree	fc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fc-name] keyword

Synopsis	Forwarding class name
Context	configure qos network <i>network-policy-name</i> ingress fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure qos network <i>network-policy-name</i> ingress fc <i>keyword</i> fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast-policer number

Synopsis	Policer to be used for broadcast traffic
Context	configure qos network <i>network-policy-name</i> ingress fc <i>keyword</i> fp-redirect-group broadcast-policer <i>number</i>
Tree	broadcast-policer
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-policer number

Synopsis	Policer to be used for multicast traffic
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Context	configure qos network <i>network-policy-name</i> ingress fc keyword fp-redirect-group multicast-policer <i>number</i>
Tree	multicast-policer
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer *number*

Synopsis	Policer to be used for unicast traffic
Context	configure qos network <i>network-policy-name</i> ingress fc keyword fp-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-policer *number*

Synopsis	Policer to be used for unknown traffic
Context	configure qos network <i>network-policy-name</i> ingress fc keyword fp-redirect-group unknown-policer <i>number</i>
Tree	unknown-policer
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria
Tree	ip-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Network Ingress IP Criteria Entry Index
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority)

ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis Default profile for the matching traffic

Context **configure** qos network *network-policy-name* ingress ip-criteria entry *number* action *profile keyword*

Tree *profile*

Options in, out, exceed, inplus

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

type *keyword*

Synopsis Action for criteria entry

Context **configure** qos network *network-policy-name* ingress ip-criteria entry *number* action type *keyword*

Tree *type*

Options ignore-match, accept

Default ignore-match

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** qos network *network-policy-name* ingress ip-criteria entry *number* description *description*

Tree *description*

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry number match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP to be used as network QoS policy match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address for network QoS policy match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry number match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address

String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port
Tree	dst-port

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Exact destination port as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than destination port value as match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment

Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address for network QoS policy match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis IPv4 prefix list containing IPv4 prefixes to match

Context **configure** **qos network** *network-policy-name* **ingress ip-criteria entry** *number* **match src-ip ip-prefix-list** *reference*

Tree [ip-prefix-list](#)

Reference **configure** **qos match-list ip-prefix-list** *named-item*

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mask *ipv4-address*

Synopsis IP address to match with source IP of the packet

Context **configure** **qos network** *network-policy-name* **ingress ip-criteria entry** *number* **match src-ip mask** *ipv4-address*

Tree [mask](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

src-port

Synopsis Enter the **src-port** context

Context **configure** **qos network** *network-policy-name* **ingress ip-criteria entry** *number* **match src-port**

Tree [src-port](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

eq number

Synopsis	Exact source port as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than source port value as match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
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Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ip-criteria entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria
Tree	ipv6-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the entry list instance
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Network Ingress IPv6 Criteria Entry Index
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority)

ef – Expedited Forwarding (high priority)
h1 – High 1 (high priority)
nc – Network Control (high priority)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis Default profile for the matching traffic

Context **configure** **qos** **network** *network-policy-name* **ingress** **ipv6-criteria** **entry** *number* **action**
profile *keyword*

Tree **profile**

Options in, out, exceed, inplus

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

type *keyword*

Synopsis Action for criteria entry

Context **configure** **qos** **network** *network-policy-name* **ingress** **ipv6-criteria** **entry** *number* **action**
type *keyword*

Tree **type**

Options ignore-match, accept

Default ignore-match

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** **qos** **network** *network-policy-name* **ingress** **ipv6-criteria** **entry** *number*
description *description*

Tree **description**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address for network QoS policy match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address

String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match dst-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match dst-ip mask ipv6-address
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Exact destination port as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than destination port value as match criterion
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
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Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match <i>dst-port</i> range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match <i>dst-port</i> range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match <i>dst-port</i> range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match <i>fragment</i> <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address for network QoS policy match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
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Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Exact source port as the match criterion
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gt *number*

Synopsis Greater than source port value as match criterion

Context **configure** [qos network](#) *network-policy-name* [ingress ipv6-criteria entry](#) *number* [match src-port gt number](#)

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Less than destination port value as the match criterion

Context **configure** [qos network](#) *network-policy-name* [ingress ipv6-criteria entry](#) *number* [match src-port lt number](#)

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enter the **range** context

Context **configure** [qos network](#) *network-policy-name* [ingress ipv6-criteria entry](#) *number* [match src-port range](#)

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>network-policy-name</i> ingress ipv6-criteria entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ler-use-dscp boolean

Synopsis	Honor the DSCP markings instead of the LSP-EXP bits
Context	configure qos network <i>network-policy-name</i> ingress ler-use-dscp <i>boolean</i>
Tree	ler-use-dscp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-exp [*lsp-exp-value*] number

Synopsis	Enter the lsp-exp list instance
Context	configure qos network <i>network-policy-name</i> ingress lsp-exp <i>number</i>
Tree	lsp-exp
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[lsp-exp-value] *number*

Synopsis LSP EXP value to associate with the forwarding class

Context **configure** *qos network network-policy-name ingress lsp-exp number*

Tree *lsp-exp*

Range 0 to 7

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc *keyword*

Synopsis Forwarding class

Context **configure** *qos network network-policy-name ingress lsp-exp number fc keyword*

Tree *fc*

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis Default profile to use for the ingressing traffic

Context **configure** *qos network network-policy-name ingress lsp-exp number profile keyword*

Tree *profile*

Options in, out, exceed, inplus

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy-id *number*



WARNING:

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

Synopsis	QoS network policy ID
Context	configure qos network <i>network-policy-name</i> policy-id <i>number</i>
Tree	policy-id
Description	<p>This command specifies the QoS network policy ID and uniquely identifies the policy on the router.</p> <p>Network policy-id 1 exists as the default policy that is applied to all network interfaces by default. The network policy-id 1 cannot be modified or deleted. It defines the default DSCP-to-FC mapping and MPLS EXP-to-FC mapping for the ingress. For the egress, it defines forwarding classes that represent individual queues and the packet marking criteria.</p> <p>Network policy-id 1 exists as the default policy that is applied to all network ports by default. This default policy cannot be modified or deleted. It defines the default DSCP-to-FC mapping and default unicast meters for ingress IP traffic. For the egress, it defines the forwarding class to dot1p and DSCP values and the packet marking criteria.</p> <p>If a new network policy is created (for instance, policy-id 3), only the default action and egress forwarding class parameters are identical to the default policy. A new network policy does not contain the default DSCP-to-FC and MPLS-EXP-to-FC mapping for network QoS policy of type ip-interface or the DSCP-to-FC mapping (for network QoS policy of type port). The default network policy can be copied to create a new network policy that includes the default ingress DSCP-to-FC and MPLS EXP-to-FC mapping (as appropriate).</p>
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope *keyword*

Synopsis	Scope of the policy
Context	configure qos network <i>network-policy-name</i> scope <i>keyword</i>
Tree	scope
Options	<p>exclusive – Allow policy to be assigned to only one port</p> <p>template – Allow policy to be assigned to multiple ports</p>

Default	template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-queue [[network-queue-policy](#)] *named-item*

Synopsis	Enter the network-queue list instance
Context	configure qos network-queue <i>named-item</i>
Tree	network-queue
Max. instances	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[network-queue-policy] *named-item*

Synopsis	Name for network queue policy
Context	configure qos network-queue <i>named-item</i>
Tree	network-queue
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos network-queue <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [*fc-name*] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos network-queue <i>named-item</i> fc <i>keyword</i>
Tree	fc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos network-queue <i>named-item</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-queue *reference*

Synopsis	Multicast queue for packets in this forwarding class
Context	configure qos network-queue <i>named-item</i> fc <i>keyword</i> multicast-queue <i>reference</i>
Tree	multicast-queue
Reference	configure qos network-queue <i>named-item</i> queue <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *reference*

Synopsis	Queue for packets in this forwarding class
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Context	configure qos network-queue <i>named-item</i> fc keyword queue <i>reference</i>
Tree	queue
Reference	configure qos network-queue <i>named-item</i> queue <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [queue-id] *number*

Synopsis	Enter the queue list instance
Context	configure qos network-queue <i>named-item</i> queue <i>number</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *number*

Synopsis	Queue identifier
Context	configure qos network-queue <i>named-item</i> queue <i>number</i>
Tree	queue
Range	1 to 16
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure qos network-queue <i>named-item</i> queue <i>number</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Description	This command configures the average frame overhead, expressed as a percentage, at which the offered load expands on the physical medium (wire) at egress. This is important for accurate "on-the-wire" rate calculations at various levels of H-QoS that do not inherently account for the physical medium characteristics. For example, without considering this overhead, a port scheduler in H-QoS might inaccurately estimate the available bandwidth on the wire, potentially leading to congestion issues and unexpected packet loss.

The rates impacted by the average frame overhead encompass the rates set on port-schedulers and aggregate rate limits for subscribers and Vports. This impact is evident in the configured values, which represent on-the-wire rates. Queue configured rates, however, remain unaffected by this adjustment and continue to reflect Layer 2 rates.

Configure the average frame overhead in networks with physical mediums that have constant sizes of transmission units (packets or cells) or in scenarios where the average packet size is known.

The average frame overhead only affects rate and weight calculations and does not impact collected statistics for accounting purposes.

For Ethernet ports, the effect of this command depends on the setting of the **avg-frame-overhead-mode** command in advanced QoS configuration policy associated with the queue. If the **avg-frame-overhead-mode** is set to **auto**, the packet encapsulation overhead calculation is based on a fixed 20 bytes (7 bytes for preamble, 1 byte for start of frame delimiter and 12 bytes for Inter-Frame Gap (IFG)) that Ethernet medium adds to every packet during transmission. In other words, the configured rates for port scheduler and aggregate rate limits for subscribers and Vports represent on-the-wire rates.

Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs decimal-number

Synopsis	Reserved buffer space for the queue
Context	configure qos network-queue <i>named-item</i> queue <i>number</i> cbs <i>decimal-number</i>
Tree	cbs
Range	0.00 to 100.00
Units	centipercen
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos network-queue <i>named-item</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure qos network-queue <i>named-item</i> queue number drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos network-queue <i>named-item</i> queue number drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs *decimal-number*

Synopsis	Percentage of buffer space allowed for the queue
Context	configure qos network-queue <i>named-item</i> queue number mbs <i>decimal-number</i>
Tree	mbs
Range	0.00 to 100.00
Units	centipercents
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipoint *boolean*



WARNING:

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

Synopsis	Apply as a multicast queue
Context	configure qos network-queue <i>named-item</i> queue number multipoint <i>boolean</i>
Tree	multipoint
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-parent

Synopsis	Enable the port-parent context
Context	configure qos network-queue <i>named-item</i> queue number port-parent
Tree	port-parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos network-queue <i>named-item</i> queue number port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight to receive bandwidth at the within-CIR level
Context	configure qos network-queue <i>named-item</i> queue number port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Port priority level for above-CIR behavior
Context	configure qos network-queue <i>named-item</i> queue <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos network-queue <i>named-item</i> queue <i>number</i> port-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-type *keyword***WARNING:**

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

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos network-queue <i>named-item</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos network-queue <i>named-item</i> queue number rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir number

Synopsis	CIR percentage rate
Context	configure qos network-queue <i>named-item</i> queue number rate cir number
Tree	cir
Range	0 to 100
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir number

Synopsis	PIR percentage rate
Context	configure qos network-queue <i>named-item</i> queue number rate pir number
Tree	pir
Range	1 to 100
Units	percent
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy [*policer-control-policy-name*] *named-item*

Synopsis	Enter the policer-control-policy list instance
Context	configure qos policer-control-policy <i>named-item</i>
Tree	policer-control-policy

Max. instances	2047
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-control-policy-name] *named-item*

Synopsis	Policer control policy name
Context	configure qos policer-control-policy <i>named-item</i>
Tree	policer-control-policy
Description	This command specifies the policer control policy name. Each policer control policy must be created with a unique policy name.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos policer-control-policy <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure qos policer-control-policy <i>named-item</i> root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	configure qos policer-control-policy <i>named-item</i> root max-percent-rate <i>decimal-number</i>
Tree	max-percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: max-percent-rate or max-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit of the arbiter
Context	configure qos policer-control-policy <i>named-item</i> root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: max-percent-rate or max-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure qos policer-control-policy <i>named-item</i> root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum separation between policer discard thresholds
Context	configure qos policer-control-policy <i>named-item</i> root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)

Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure qos policer-control-policy <i>named-item</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[priority-level] *number*

Synopsis	Priority level
Context	configure qos policer-control-policy <i>named-item</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fixed-mbs *boolean*

Synopsis	Consider cumulative buffer space to be fixed
Context	configure qos policer-control-policy <i>named-item</i> root priority-mbs-thresholds priority <i>number</i> fixed-mbs <i>boolean</i>
Tree	fixed-mbs
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space

Context **configure** qos policer-control-policy *named-item* root priority-mbs-thresholds priority *number* **mbs-contribution** (*number* | *keyword*)

Tree **mbs-contribution**

Range 0 to 16777216

Units bytes

Options auto

Default auto

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile-preferred *boolean*

Synopsis Provide a preference to consume PIR bucket tokens

Context **configure** qos policer-control-policy *named-item* root profile-preferred *boolean*

Tree **profile-preferred**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tier [*tier-id*] *number*

Synopsis Enter the **tier** list instance

Context **configure** qos policer-control-policy *named-item* tier *number*

Tree **tier**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[tier-id] *number*

Synopsis Tier for policer control policer arbiter

Context	configure qos policer-control-policy <i>named-item tier number</i>
Tree	tier
Range	1 to 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arbiter [[arbiter-name](#)] *named-item*

Synopsis	Enter the arbiter list instance
Context	configure qos policer-control-policy <i>named-item tier number arbiter named-item</i>
Tree	arbiter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[arbiter-name] *named-item*

Synopsis	Arbiter name
Context	configure qos policer-control-policy <i>named-item tier number arbiter named-item</i>
Tree	arbiter
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos policer-control-policy <i>named-item tier number arbiter named-item arbiter-parent</i>
Tree	arbiter-parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arbiter-name *named-item*

Synopsis	Arbiter name
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> arbiter-parent arbiter-name <i>named-item</i>
Tree	arbiter-name
Description	This command specifies the arbiter name. In tier 1, the arbiter name is not allowed and only the system reversed name "root" is accepted. The specified arbiter name must exist within the policer control policy at tier 1 or the parent command fails. When a tiered arbiter is acting as a parent for another tiered arbiter, the parent arbiter cannot be removed from the policy. The child arbiter receives all bandwidth directly from its parent arbiter (that receives bandwidth from the root arbiter).
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level the child arbiter uses on its parent
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight attribute at parent level applied to children
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> arbiter-parent weight <i>number</i>
Tree	weight
Description	This command defines how multiple children at the same parent strict level compete when insufficient bandwidth exists on the parent for that level. Each child's weight is divided by the sum of the active children's weights and the result is multiplied by the available bandwidth. If a child cannot receive its entire weighted fair share of bandwidth

due to a defined child rate limit, the remainder of its bandwidth is distributed between the other children based on their weights.

Range	1 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 6400000000

Options	max
Default	max
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos policer-control-policy <i>named-item</i> tier <i>number</i> arbiter <i>named-item</i> reference-rate <i>keyword</i>
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-scheduler-policy [*name*] *named-item*

Synopsis	Enter the port-scheduler-policy list instance
Context	configure qos port-scheduler-policy <i>named-item</i>
Tree	port-scheduler-policy
Description	<p>Commands in this context configure port scheduler policies.</p> <p>When a port scheduler has been associated with an egress port, it is possible to override the following command options:</p> <ul style="list-style-type: none"> • The maximum rate allowed for the scheduler • The maximum rate for each priority level (1 to 8) • The CIR associated with each priority level (1 to 8) <p>The orphan priority level (level 0) has no configuration command options and cannot be overridden.</p>
Max. instances	1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Port scheduler policy name
Context	configure qos port-scheduler-policy <i>named-item</i>
Tree	port-scheduler-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos port-scheduler-policy <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i>
Tree	level
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-id] *number*

Synopsis	Priority level this port scheduler policy
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i>
Tree	level
Range	1 to 8

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-threshold *number*

Synopsis	Monitoring threshold of the configured rate
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i> monitor-threshold <i>number</i>
Tree	monitor-threshold
Description	This command specifies the configured rate as a percentage. If the offered rate exceeds the configured threshold, a counter monitoring the threshold is increased.
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight of the level in the weighted scheduler group
Context	configure qos port-scheduler-policy <i>named-item</i> level <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos port-scheduler-policy <i>named-item</i> max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Default	max

Notes	The following elements are part of a choice: max-percent-rate or max-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-threshold *number*

Synopsis	Congestion monitoring threshold
Context	configure qos port-scheduler-policy <i>named-item</i> monitor-threshold <i>number</i>
Tree	monitor-threshold
Description	<p>This command defines the congestion monitoring threshold for the desired monitoring entity under the port-scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.</p> <p>The congestion threshold is specified as a percentage of the configured PIR rate for the entity for which congestion monitoring is desired. For example, if the configured PIR rate for level 1 is 1000,000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is >90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.</p>
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

orphan-overrides

Synopsis	Enter the orphan-overrides context
Context	configure qos port-scheduler-policy <i>named-item</i> orphan-overrides
Tree	orphan-overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority level for within-CIR orphan behavior
Context	configure qos port-scheduler-policy <i>named-item</i> orphan-overrides cir-level <i>number</i>
Tree	cir-level

Description	This command defines the port priority that the orphan queues and schedulers use to receive bandwidth for their within-CIR offered-load. If the cir-weight command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and this command setting is ignored.
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos port-scheduler-policy <i>named-item</i> orphan-overrides cir-weight <i>number</i>
Tree	cir-weight
Description	This command defines the weight the orphan queues and schedulers will use in the within-CIR port priority level. When this command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and the cir-level command is ignored.
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Port priority level for above-CIR orphan behavior
Context	configure qos port-scheduler-policy <i>named-item</i> orphan-overrides level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight to use in the above-CIR port priority level
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Context	configure qos port-scheduler-policy <i>named-item</i> orphan-overrides weight <i>number</i>
Tree	weight
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pre-classifier-policy [*name*] *named-item-64*

Synopsis	Enter the pre-classifier-policy list instance
Context	configure qos pre-classifier-policy <i>named-item-64</i>
Tree	pre-classifier-policy
Description	Commands in this context configure a QoS preclassifier policy.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

[name] *named-item-64*

Synopsis	Preclassifier policy name
Context	configure qos pre-classifier-policy <i>named-item-64</i>
Tree	pre-classifier-policy
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

default-policer-id *number*

Synopsis	Default policer ID for the preclassifier policy
Context	configure qos pre-classifier-policy <i>named-item-64</i> default-policer-id <i>number</i>
Tree	default-policer-id
Range	1 to 4
Introduced	26.3.R1

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** qos pre-classifier-policy *named-item-64* **description** *description*

Tree **description**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 26.3.R1

Platforms 7705 SAR Gen 2

policer [**policer-id**] *number*

Synopsis Enter the **policer** list instance

Context **configure** qos pre-classifier-policy *named-item-64* **policer** *number*

Tree **policer**

Description Commands in this context configure the policer for the preclassifier policy.

Introduced 26.3.R1

Platforms 7705 SAR Gen 2

[policer-id] *number*

Synopsis Policer ID for the preclassifier policy

Context **configure** qos pre-classifier-policy *named-item-64* **policer** *number*

Tree **policer**

Range 1 to 4

Notes This element is part of a list key.

Introduced 26.3.R1

Platforms 7705 SAR Gen 2

dot1p *number*

Synopsis Dot1p level configured for this policer

Context **configure** qos pre-classifier-policy *named-item-64* **policer** *number* **dot1p** *number*

Tree	dot1p
Description	This command configures the dot1p marking to policer mapping under the preclassifier policy.
Range	0 to 7
Max. instances	8
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

mbs number

Synopsis	MBS percentage reserved for high priority traffic
Context	configure qos pre-classifier-policy <i>named-item-64</i> policer <i>number</i> mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS), which is a percentage of the PIR leaky bucket reserved for high priority traffic.
Range	0 to 100
Default	100
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

pir number

Synopsis	Explicit maximum frame-based bandwidth limit
Context	configure qos pre-classifier-policy <i>named-item-64</i> policer <i>number</i> pir <i>number</i>
Tree	pir
Description	This command configures the PIR, which is the explicit maximum frame-based bandwidth limit.
Range	0 to 100
Units	percent
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

queue-group-templates

Synopsis	Enter the queue-group-templates context
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Context	configure qos queue-group-templates
Tree	queue-group-templates
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure qos queue-group-templates egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group [egress-queue-group-name] *named-item*

Synopsis	Enter the queue-group list instance
Context	configure qos queue-group-templates egress queue-group <i>named-item</i>
Tree	queue-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[egress-queue-group-name] *named-item*

Synopsis	Egress queue group template name
Context	configure qos queue-group-templates egress queue-group <i>named-item</i>
Tree	queue-group
Description	This command specifies the name of the egress queue group template. Each ingress queue group template must be uniquely named within the system. Multiple ingress queue group templates may not share the same name. An ingress and egress queue group template may share the same name.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-or-empty*

Synopsis	Text description
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> description <i>description-or-empty</i>
Tree	description
String length	0 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> fc <i>keyword</i>
Tree	fc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue

Synopsis	Enter the queue context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> fc keyword queue
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	No mid-pool is associated with this parent-pool
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> fc keyword queue none
Tree	none
Notes	The following elements are part of a choice: none or queue-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-id *reference*

Synopsis	Queue defined in forwarding class mapping
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> fc keyword queue queue-id reference
Tree	queue-id
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number
Notes	The following elements are part of a choice: none or queue-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [**policer-id**] *number*

Synopsis	Enter the policer list instance
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer number
Tree	policer
Description	Commands in this context configure a QoS egress queue-group policer.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[policer-id] *number*

Synopsis Egress queue-group policer ID
Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number*
Tree policer
Description This command specifies the queue-group policer that will either be created or edited within the queue group template.
Range 1 to 16
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

arbiter-parent

Synopsis Enter the **arbiter-parent** context
Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number* arbiter-parent
Tree arbiter-parent
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

arbiter-name *named-item*

Synopsis Arbiter name
Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number* arbiter-parent arbiter-name *named-item*
Tree arbiter-name
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

level *number*

Synopsis	Priority level
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight in the priority level
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> <i>description</i> <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-pir *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> <i>exceed-pir</i> <i>boolean</i>
Tree	<i>exceed-pir</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> <i>high-prio-only</i> (<i>number</i> <i>keyword</i>)
Tree	<i>high-prio-only</i>
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum buffer size for the template queue
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Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer number mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer number packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer number percent-rate cir <i>decimal-number</i>

Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> policer <i>number</i> profile-capped <i>boolean</i>
Tree	profile-capped
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

rate

Synopsis Enter the **rate** context

Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number* **rate**

Tree **rate**

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis Administrative CIR

Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number* **rate** **cir** (*number* | *keyword*)

Tree **cir**

Range 0 to 2000000000

Units kilobps

Options max

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis Administrative PIR

Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number* **rate** **pir** (*number* | *keyword*)

Tree **pir**

Range 1 to 2000000000

Units kilobps

Options max

Default max

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

stat-mode *keyword*

Synopsis Mode of statistics collected by the policer

Context **configure** qos queue-group-templates egress queue-group *named-item* policer *number* **stat-mode** *keyword*

Tree **stat-mode**

Options no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile

Default minimal

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

queue [**queue-id**] *number*

Synopsis Enter the **queue** list instance

Context **configure** qos queue-group-templates egress queue-group *named-item* **queue** *number*

Tree **queue**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[queue-id] *number*

Synopsis Egress Queue-Group queue identifier

Context **configure** qos queue-group-templates egress queue-group *named-item* **queue** *number*

Tree **queue**

Range 1 to 8

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

burst-limit (*number* | *keyword*)

Synopsis Explicit shaping burst size of a queue

Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed

Synopsis	Enter the exceed context
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Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number drop-tail exceed
Tree	exceed
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number drop-tail exceed percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number drop-tail high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number drop-tail high percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

highplus

Synopsis	Enter the highplus context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> drop-tail highplus
Tree	highplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
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Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-mbs *boolean*

Synopsis	Allow MBS size modification to maintain maximum latency
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number dynamic-mbs <i>boolean</i>
Tree	dynamic-mbs
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
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Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number packet-byte-offset number
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir decimal-number

Synopsis	Administrative CIR percent
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	Administrative PIR percent
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-parent

Synopsis	Enable the port-parent context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> port-parent
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used at above-CIR port priority level
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> port-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-delay *number*

Synopsis	Target queue delay for forwarding packets through queue
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> queue-delay <i>number</i>

Tree	queue-delay
Range	1 to 5000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-type *keyword*

Synopsis	Method used to service queue from hardware perspective
Context	configure qos queue-group-templates egress queue-group named-item queue number queue-type keyword
Tree	queue-type
Options	expedited, best-effort
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates egress queue-group named-item queue number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group named-item queue number rate cir (number keyword)
Tree	cir
Range	0 to 20000000000
Units	kilobps
Options	max
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-name *named-item*

Synopsis	Parent scheduler name
Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent scheduler-name <i>named-item</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

weight *number*

Synopsis Weight used by the scheduler for feeding the queue

Context **configure** qos queue-group-templates egress queue-group *named-item* queue *number*
scheduler-parent weight *number*

Tree weight

Range 0 to 100

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

wred-queue

Synopsis Enter the **wred-queue** context

Context **configure** qos queue-group-templates egress queue-group *named-item* queue *number*
wred-queue

Tree wred-queue

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis Pool association to allow queue-specific WRED slopes

Context **configure** qos queue-group-templates egress queue-group *named-item* queue *number*
wred-queue mode *keyword*

Tree mode

Options native, pool-per-queue

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

usage *keyword*

Synopsis Congestion control type

Context	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i> <i>wred-queue</i> usage <i>keyword</i>
Tree	usage
Options	auto, exceed-low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure qos queue-group-templates ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group [ingress-queue-group-name] *named-item*

Synopsis	Enter the queue-group list instance
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Tree	queue-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ingress-queue-group-name] *named-item*

Synopsis	Ingress queue group template name
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Tree	queue-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-id](#)] *number*

Synopsis	Enter the policer list instance
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *number*

Synopsis	Ingress Queue-Group Policer identifier
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i>
Tree	policer
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

cir keyword

Synopsis Constraint used when deriving the operational CIR value

Context **configure** qos queue-group-templates ingress queue-group *named-item* policer *number* adaptation-rule cir *keyword*

Tree cir

Options
max – At maximum, the configured rate
min – At minimum, the configured rate
closest – Closest rate to the configured value

Default closest

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir keyword

Synopsis Constraint used when deriving the operational PIR value

Context **configure** qos queue-group-templates ingress queue-group *named-item* policer *number* adaptation-rule pir *keyword*

Tree pir

Options
max – At maximum, the configured rate
min – At minimum, the configured rate
closest – Closest rate to the configured value

Default closest

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

arbiter-parent

Synopsis Enter the **arbiter-parent** context

Context **configure** qos queue-group-templates ingress queue-group *named-item* policer *number* arbiter-parent

Tree arbiter-parent

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

arbiter-name *named-item*

Synopsis	Arbiter name
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> arbiter-parent arbiter-name <i>named-item</i>
Tree	arbiter-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
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Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> <i>cbs</i> (<i>number</i> <i>keyword</i>)
Tree	<i>cbs</i>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> <i>description</i> <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> <i>high-prio-only</i> (<i>number</i> <i>keyword</i>)
Tree	<i>high-prio-only</i>
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum buffer size for the template queue
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Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>

Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group named-item policer number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	configure qos queue-group-templates ingress queue-group named-item policer number profile-capped boolean
Tree	profile-capped
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates ingress queue-group named-item policer number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 20000000000
Units	kilobps
Options	max
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 20000000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Default	minimal

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [*queue-id*] *number*

Synopsis	Enter the queue list instance
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *number*

Synopsis	Ingress Queue-Group Queue identifier
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)

Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipoint *boolean*



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

Synopsis	Create an ingress multipoint queue
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> multipoint <i>boolean</i>
Tree	multipoint
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-mode *keyword***WARNING:**

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

Synopsis	Queue operational mode for explicitly profiled packets
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> queue-mode <i>keyword</i>
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-type *keyword***WARNING:**

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

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, best-effort

Default	best-effort
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue number rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue number rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000

Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-name *named-item*

Synopsis	Scheduler name
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent scheduler-name <i>named-item</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-egress [**sap-egress-policy-name**] *qos-policy-name*

Synopsis	Enter the sap-egress list instance
Context	configure qos sap-egress <i>qos-policy-name</i>
Tree	sap-egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-egress-policy-name] *qos-policy-name*

Synopsis	Policy name
Context	configure qos sap-egress <i>qos-policy-name</i>
Tree	sap-egress
String length	1 to 64
String format	'qos-policy-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-egress <i>qos-policy-name</i> description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p [**dot1p-value**] *number*

Synopsis	Enter the dot1p list instance
Context	configure qos sap-egress qos-policy-name dot1p <i>number</i>
Tree	dot1p
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos sap-egress qos-policy-name dot1p <i>number</i>
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress qos-policy-name dot1p <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis Default profile for the ingressing traffic

Context **configure** [qos sap-egress](#) *qos-policy-name* [dot1p](#) *number* **profile** *keyword*

Tree [profile](#)

Options in, out, de, exceed, inplus

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dscp [[dscp-name](#)] *keyword*

Synopsis Enter the **dscp** list instance

Context **configure** [qos sap-egress](#) *qos-policy-name* [dscp](#) *keyword*

Tree [dscp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[dscp-name] *keyword*

Synopsis DSCP name to perform reclassification actions

Context **configure** [qos sap-egress](#) *qos-policy-name* [dscp](#) *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc *keyword*

Synopsis Forwarding class

Context	configure qos sap-egress qos-policy-name dscp keyword fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile keyword

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress qos-policy-name dscp keyword profile keyword
Tree	profile
Options	in, out, exceed, inplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ethernet-ctag boolean

Synopsis	Tag value for dot1p and DE (Drop-Eligible) that are used by all dot1-p entries
Context	configure qos sap-egress qos-policy-name ethernet-ctag boolean
Tree	ethernet-ctag
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [fc-name] keyword

Synopsis	Enter the fc list instance
Context	configure qos sap-egress qos-policy-name fc keyword
Tree	fc
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[fc-name] *keyword*

Synopsis Forwarding class

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** *keyword*

Tree [fc](#)

Options
be – Best Effort
l2 – Low 2 (best effort)
af – Assured Forwarding (assured)
l1 – Low 1 (assured)
h2 – High 2 (high priority)
ef – Expedited Forwarding (high priority)
h1 – High 1 (high priority)
nc – Network Control (high priority)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

de-mark

Synopsis Enable the **de-mark** context

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** *keyword* **de-mark**

Tree [de-mark](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

force *number*

Synopsis DE value

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** *keyword* **de-mark** **force** *number*

Tree [force](#)

Range 0 to 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

de-mark-inner

Synopsis	Enable the de-mark-inner context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword de-mark-inner
Tree	de-mark-inner
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force number

Synopsis	DE value to set in inner VLAN tag
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword de-mark-inner force <i>number</i>
Tree	force
Range	0 to 1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

de-mark-outer

Synopsis	Enable the de-mark-outer context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword de-mark-outer
Tree	de-mark-outer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force number

Synopsis	DE value to set in outer VLAN tag
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword de-mark-outer force <i>number</i>
Tree	force
Range	0 to 1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p

Synopsis	Enter the dot1p context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p
Tree	dot1p
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile *number*

Synopsis	Dot1p value for exceed-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p exceed-profile <i>number</i>
Tree	exceed-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile *number*

Synopsis	Dot1p value for in-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p in-profile <i>number</i>
Tree	in-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile *number*

Synopsis	Dot1p value for out-of-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p out-profile <i>number</i>
Tree	out-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p-inner

Synopsis	Enter the dot1p-inner context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-inner
Tree	dot1p-inner
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile *number*

Synopsis	Inner Dot1p value for in-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-inner <i>in-profile</i> <i>number</i>
Tree	in-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile *number*

Synopsis	Inner Dot1p value for out-of-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-inner <i>out-profile</i> <i>number</i>
Tree	out-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p-outer

Synopsis	Enter the dot1p-outer context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-outer
Tree	dot1p-outer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile *number*

Synopsis	Outer Dot1p value for exceed-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-outer exceed-profile <i>number</i>
Tree	exceed-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile *number*

Synopsis	Outer Dot1p value for in-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-outer in-profile <i>number</i>
Tree	in-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile *number*

Synopsis	Outer Dot1p value for out-of-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dot1p-outer out-profile <i>number</i>
Tree	out-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp

Synopsis	Enter the dscp context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword dscp
Tree	dscp
Notes	The following elements are part of a choice: dscp or prec .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

exceed-profile *keyword*

Synopsis DSCP name for exceed-profile frames

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** *keyword* **dscp** **exceed-profile** *keyword*

Tree [exceed-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

in-profile *keyword*

Synopsis DSCP name for in-profile frames

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** *keyword* **dscp** **in-profile** *keyword*

Tree [in-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

out-profile *keyword*

Synopsis DSCP name for out-of-profile frames

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** *keyword* **dscp** **out-profile** *keyword*

Tree [out-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer *reference*

Synopsis Policer to forward the traffic

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** keyword [policer](#) *reference*

Tree [policer](#)

Reference **configure** [qos sap-egress](#) *qos-policy-name* [policer](#) *number*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

port-redirect-group-queue

Synopsis Enable the **port-redirect-group-queue** context

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** keyword [port-redirect-group-queue](#)

Tree [port-redirect-group-queue](#)

Notes The following elements are part of a choice: **port-redirect-group-queue**, **queue**, or **queue-group-queue**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

queue *number*

Synopsis Queue to forward the traffic

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** keyword [port-redirect-group-queue](#) [queue](#) *number*

Tree [queue](#)

Range 1 to 8

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prec

Synopsis Enter the **prec** context

Context **configure** [qos sap-egress](#) *qos-policy-name* **fc** keyword [prec](#)

Tree [prec](#)

Notes	The following elements are part of a choice: dscp or prec .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-profile *number*

Synopsis	Precedence for exceed-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword prec exceed-profile <i>number</i>
Tree	exceed-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-profile *number*

Synopsis	Precedence value for in-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword prec in-profile <i>number</i>
Tree	in-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-profile *number*

Synopsis	Precedence value for out-of-profile frames
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword prec out-profile <i>number</i>
Tree	out-profile
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *reference*

Synopsis	Queue to forward the traffic
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword queue <i>reference</i>

Tree	queue
Reference	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i>
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-queue

Synopsis	Enable the queue-group-queue context
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance ID
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword queue-group-queue instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *reference*

Synopsis	SAP egress queue ID
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword queue-group-queue queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i> queue <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	configure qos sap-egress <i>qos-policy-name</i> fc keyword queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria
Tree	ip-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	IP Criteria Entry Index
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

action

Synopsis Enter the **action** context

Context **configure** [qos sap-egress](#) *qos-policy-name* [ip-criteria entry](#) *number* [action](#)

Tree [action](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc keyword

Synopsis Forwarding class

Context **configure** [qos sap-egress](#) *qos-policy-name* [ip-criteria entry](#) *number* [action](#) [fc](#) *keyword*

Tree [fc](#)

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer reference

Synopsis Policer identifier for the matched traffic

Context **configure** [qos sap-egress](#) *qos-policy-name* [ip-criteria entry](#) *number* [action](#) [policer](#) *reference*

Tree [policer](#)

Reference **configure** [qos sap-egress](#) *qos-policy-name* [policer](#) *number*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

port-redirect-group-queue *boolean*

Synopsis	Use queue specified in egress access port queue group
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number action port-redirect-group-queue <i>boolean</i>
Tree	port-redirect-group-queue
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number action profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number action queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number action type <i>keyword</i>
Tree	type
Options	ignore-match, accept

Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
Context	configure qos sap-egress qos-policy-name ip-criteria entry number action use-fc-mapped-queue <i>boolean</i>
Tree	use-fc-mapped-queue
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-egress qos-policy-name ip-criteria entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp *keyword*

Synopsis	DSCP value to match in the packet
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Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (ipv4-prefix-with-host-bits | ipv4-address)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-ip address (ipv4-prefix-with-host-bits ipv4-address)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list reference

Synopsis	List of IPv4 prefixes for the match criteria
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-ip ip-prefix-list reference
Tree	ip-prefix-list

Reference	configure qos match-list ip-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match dst-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
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Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Fragmented packets as the match criterion
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match fragment keyword
Tree	fragment
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol (number | keyword)

Synopsis	IP protocol to match
Context	configure qos sap-egress qos-policy-name ip-criteria entry number match protocol (number keyword)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number match src-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-port gt <i>number</i>

Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number match src-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the port range
Context	configure qos sap-egress <i>qos-policy-name</i> ip-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

start *number*

Synopsis Lower bound of the port range

Context **configure** qos sap-egress qos-policy-name ip-criteria entry *number* match src-port range start *number*

Tree start

Range 0 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6-criteria

Synopsis Enter the **ipv6-criteria** context

Context **configure** qos sap-egress qos-policy-name ipv6-criteria

Tree ipv6-criteria

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entry [*entry-id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** qos sap-egress qos-policy-name ipv6-criteria entry *number*

Tree entry

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[entry-id] *number*

Synopsis IP Criteria Entry Index

Context **configure** qos sap-egress qos-policy-name ipv6-criteria entry *number*

Tree entry

Range 1 to 65535

Notes This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer reference

Synopsis	Policer identifier for the matched traffic
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> action policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group-queue *boolean*

Synopsis	Use queue specified in egress access port queue group
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number action port-redirect-group-queue boolean
Tree	port-redirect-group-queue
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number action profile keyword
Tree	profile
Options	in, out, exceed, inplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number action queue number
Tree	queue
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number action type keyword
Tree	type

Options	ignore-match, accept
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number action use-fc-mapped-queue <i>boolean</i>
Tree	use-fc-mapped-queue
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address for SAP QoS policy match
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address mask to match with destination IP of packet
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Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dst-ip mask ipv6-address
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Value 'less than' as match condition

Context **configure** qos sap-egress qos-policy-name ipv6-criteria entry number match dst-port lt number

Tree lt

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enter the **range** context

Context **configure** qos sap-egress qos-policy-name ipv6-criteria entry number match dst-port range

Tree range

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end *number*

Synopsis Upper bound of the port range

Context **configure** qos sap-egress qos-policy-name ipv6-criteria entry number match dst-port range end number

Tree end

Range 0 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start *number*

Synopsis Lower bound of the port range

Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match <i>dst-port</i> range <i>start</i> <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address for SAP QoS policy match
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry number match src-ip mask ipv6-address
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry number match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry number match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt *number*

Synopsis	Value 'greater than' as match condition
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Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match src-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-egress qos-policy-name ipv6-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the port range
Context	configure qos sap-egress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent-location *keyword*

Synopsis	Location where queues look to find parent scheduler
Context	configure qos sap-egress <i>qos-policy-name</i> parent-location <i>keyword</i>
Tree	parent-location
Options	auto, sla
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-id](#)] *number*

Synopsis	Enter the policer list instance
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *number*

Synopsis	SAP egress policer ID
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i>

Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max – At maximum, the configured rate min – At minimum, the configured rate closest – Closest rate to the configured value
Default	closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max – At maximum, the configured rate min – At minimum, the configured rate closest – Closest rate to the configured value
Default	closest
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

arbiter-parent

Synopsis Enter the **arbiter-parent** context

Context **configure** qos sap-egress qos-policy-name policer number arbiter-parent

Tree [arbiter-parent](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

arbiter-name *named-item*

Synopsis Arbiter name

Context **configure** qos sap-egress qos-policy-name policer number arbiter-parent arbiter-name *named-item*

Tree [arbiter-name](#)

Description This command specifies an arbiter name. The policer is intended to become a child to one of the tiered arbiters with the specified arbiter name where an instance of the policer is created. If the specified arbiter name does not exist, the policer is placed in the orphan state.

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

level *number*

Synopsis Level of priority while feeding to the parent

Context **configure** qos sap-egress qos-policy-name policer number arbiter-parent level *number*

Tree [level](#)

Range 1 to 8

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos sap-egress qos-policy-name policer number arbiter-parent weight number
Tree	weight
Range	1 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-egress qos-policy-name policer number cbs (number keyword)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-egress qos-policy-name policer number description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp-prec-remarking *boolean*

Synopsis	Remark DSCP/precedence based on packet profile state
Context	configure qos sap-egress qos-policy-name policer number dscp-prec-remarking boolean
Tree	dscp-prec-remarking
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-pir *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	configure qos sap-egress qos-policy-name policer number exceed-pir boolean
Tree	exceed-pir
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	configure qos sap-egress qos-policy-name policer number high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	configure qos sap-egress qos-policy-name policer number mbs (<i>number</i> <i>keyword</i>)

Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

port-parent

Synopsis	Enable the port-parent context
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> port-parent
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority level for within-CIR offered load
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Context	configure qos sap-egress qos-policy-name policer number port-parent cir-level number
Tree	cir-level
Description	This command defines the port priority that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the port schedulers with-CIR pass and the cir-weight command is ignored.
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight number

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-egress qos-policy-name policer number port-parent cir-weight number
Tree	cir-weight
Description	<p>This command defines the weight that the policer uses at the within-CIR port priority level.</p> <p>All CIR weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to the default value, the policer receives bandwidth only after other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level number

Synopsis	Port priority level for above-CIR behavior
Context	configure qos sap-egress qos-policy-name policer number port-parent level number
Tree	level
Range	1 to 8

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight to use in the above-CIR port priority level
Context	configure qos sap-egress qos-policy-name policer number port-parent weight number
Tree	weight
Description	<p>This command defines the weight that the policer uses at the above-CIR port priority level.</p> <p>All weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after other children with a non-zero weight at this level.</p>
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile-capped *boolean*

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	configure qos sap-egress qos-policy-name policer number profile-capped boolean
Tree	profile-capped
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile-out-preserve *boolean*

Synopsis	Preserve the color of offered out-of-profile traffic
Context	configure qos sap-egress qos-policy-name policer number profile-out-preserve boolean

Tree	profile-out-preserve
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max

Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos sap-egress qos-policy-name policer number scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority level for within-CIR offered load
Context	configure qos sap-egress qos-policy-name policer number scheduler-parent cir-level <i>number</i>
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the schedulers within-CIR pass and the cir-weight command is ignored.
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-egress qos-policy-name policer number scheduler-parent cir-weight <i>number</i>
Tree	cir-weight

Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	configure qos sap-egress qos-policy-name policer <i>number</i> scheduler-parent level <i>number</i>
Tree	level
Description	<p>This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.</p> <p>Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.</p>
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-name *named-item*

Synopsis	Scheduler name
Context	configure qos sap-egress qos-policy-name policer <i>number</i> scheduler-parent scheduler-name <i>named-item</i>
Tree	scheduler-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

weight *number*

Synopsis Policer weight at the above-CIR priority level
Context **configure** [qos sap-egress](#) *qos-policy-name* [policer](#) *number* [scheduler-parent](#) [weight](#) *number*
Tree [weight](#)
Range 0 to 100
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

stat-mode *keyword*

Synopsis Mode of statistics collected by the policer
Context **configure** [qos sap-egress](#) *qos-policy-name* [policer](#) *number* [stat-mode](#) *keyword*
Tree [stat-mode](#)
Options no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile, ecn-codepoints, ecn-marked
Default minimal
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policy-id *number*



WARNING:

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

Synopsis Egress SAP QoS policy ID
Context **configure** [qos sap-egress](#) *qos-policy-name* [policy-id](#) *number*
Tree [policy-id](#)
Range 1 to 65535
Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prec [*prec-value*] *number*

Synopsis Enter the **prec** list instance

Context **configure** *qos sap-egress* *qos-policy-name* *prec* *number*

Tree *prec*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[prec-value] *number*

Synopsis Precedence value for which mapping is performed

Context **configure** *qos sap-egress* *qos-policy-name* *prec* *number*

Tree *prec*

Range 0 to 7

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc *keyword*

Synopsis Forwarding class

Context **configure** *qos sap-egress* *qos-policy-name* *prec* *number* **fc** *keyword*

Tree **fc**

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress <i>qos-policy-name</i> prec number profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *number*

Synopsis	Egress Queue-Group queue identifier
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Description	This command configures the average frame overhead, expressed as a percentage, at which the offered load expands on the physical medium (wire) at egress. This is important for accurate "on-the-wire" rate calculations at various levels of H-QoS that do

not inherently account for the physical medium characteristics. For example, without considering this overhead, a port-scheduler in H-QoS might inaccurately estimate the available bandwidth on the wire, potentially leading to congestion issues and unexpected packet loss.

The rates impacted by the average frame overhead encompass the rates set on port-schedulers and aggregate rate limits for subscribers and Vports. This impact is evident in the configured values, which represent on-the-wire (OTW) rates. Queue configured rates, however, remain unaffected by this adjustment and continue to reflect Layer 2 rates.

Configure the average frame overhead in networks with physical mediums that have constant sizes of transmission units (packets or cells) or in scenarios where the average packet size is known.

The average frame overhead only affects rate and weight calculations and does not impact collected statistics for accounting purposes.

For Ethernet ports, the effect of this command depends on the setting of the **avg-frame-overhead-mode** command in advanced QoS configuration policy associated with the queue. If the **avg-frame-overhead-mode** is set to **auto**, the packet encapsulation overhead calculation is based on a fixed 20 bytes (7 bytes for preamble, 1 byte for start of frame delimiter and 12 bytes for Inter-Frame Gap) that Ethernet medium adds to every packet during transmission. In other words, the configured rates for port-scheduler and aggregate rate limits for subscribers and Vports represent OTW rates.

Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Notes	The following elements are part of a choice: burst-limit or burst-limit-delay-time .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Default	auto
Notes	The following elements are part of a choice: cbs , cbs-delay-percent , or cbs-delay-time .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed

Synopsis	Enter the exceed context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail exceed
Tree	exceed
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail exceed percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)

Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail high percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

highplus

Synopsis	Enter the highplus context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail highplus
Tree	highplus
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
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Context	configure qos sap-egress qos-policy-name queue number mbs (number keyword)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Default	auto
Notes	The following elements are part of a choice: mbs , mbs-delay-percent , or mbs-delay-time .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	configure qos sap-egress qos-policy-name queue number packet-byte-offset number
Tree	packet-byte-offset
Range	-64 to 32
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-egress qos-policy-name queue number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-egress qos-policy-name queue number percent-rate cir decimal-number

Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	Administrative PIR percent
Context	configure qos sap-egress <i>qos-policy-name</i> queue number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate keyword

Synopsis	Reference rate
Context	configure qos sap-egress <i>qos-policy-name</i> queue number percent-rate reference-rate keyword
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-parent

Synopsis	Enable the port-parent context
Context	configure qos sap-egress <i>qos-policy-name</i> queue number port-parent
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos sap-egress <i>qos-policy-name</i> queue number port-parent cir-level number
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-egress <i>qos-policy-name</i> queue number port-parent cir-weight number
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	configure qos sap-egress <i>qos-policy-name</i> queue number port-parent level number
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used at above-CIR port priority level
Context	configure qos sap-egress <i>qos-policy-name</i> queue number port-parent weight number

Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-type *keyword*



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

Synopsis	Method used to service queue from hardware perspective
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000

Units	kilobps
Options	max
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-egress qos-policy-name queue number scheduler-parent cir-weight number
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-egress qos-policy-name queue number scheduler-parent level number
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-name *named-item*

Synopsis	Parent scheduler name
Context	configure qos sap-egress qos-policy-name queue number scheduler-parent scheduler-name named-item
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	configure qos sap-egress qos-policy-name queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wred-queue

Synopsis	Enter the wred-queue context
Context	configure qos sap-egress qos-policy-name queue <i>number</i> wred-queue
Tree	wred-queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Pool association to allow queue-specific WRED slopes
Context	configure qos sap-egress qos-policy-name queue <i>number</i> wred-queue mode <i>keyword</i>
Tree	mode
Options	native, pool-per-queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

usage keyword

Synopsis	Congestion control type
Context	configure qos sap-egress qos-policy-name queue number wred-queue usage keyword
Tree	usage
Options	auto, exceed-low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope keyword

Synopsis	Scope of the policy
Context	configure qos sap-egress qos-policy-name scope keyword
Tree	scope
Options	exclusive – Allow policy to be assigned to only one port template – Allow policy to be assigned to multiple ports
Default	template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-ingress [sap-ingress-policy-name] qos-policy-name

Synopsis	Enter the sap-ingress list instance
Context	configure qos sap-ingress qos-policy-name
Tree	sap-ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-ingress-policy-name] qos-policy-name

Synopsis	Policy name
Context	configure qos sap-ingress qos-policy-name
Tree	sap-ingress
String length	1 to 64
String format	'qos-policy-name' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-fc *sap-ingress-fc-name*

Synopsis	Default forwarding class for non-matching traffic
Context	configure qos sap-ingress <i>qos-policy-name</i> default-fc <i>sap-ingress-fc-name</i>
Tree	default-fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be 2 af l1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-priority *keyword*

Synopsis	Priority for packets received on an ingress SAP
Context	configure qos sap-ingress <i>qos-policy-name</i> default-priority <i>keyword</i>
Tree	default-priority
Options	low, high
Default	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-ingress <i>qos-policy-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p [**dot1p-value**] *number*

Synopsis	Enter the dot1p list instance
Context	configure qos sap-ingress qos-policy-name dot1p number
Tree	dot1p
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos sap-ingress qos-policy-name dot1p number
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc sap-ingress-fc-name

Synopsis	Forwarding class for traffic matching specified dot1p
Context	configure qos sap-ingress qos-policy-name dot1p number fc sap-ingress-fc-name
Tree	fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be 2 af l1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *keyword*

Synopsis	Priority for packets that match the Dot1p value
Context	configure qos sap-ingress qos-policy-name dot1p number priority keyword
Tree	priority
Options	low, high, auto

Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp [**dscp-name**] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos sap-ingress qos-policy-name dscp keyword
Tree	dscp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dscp-name] *keyword*

Synopsis	Name for the Differentiated Services Code Point (DSCP)
Context	configure qos sap-ingress qos-policy-name dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc sap-ingress-fc-name

Synopsis	Forwarding class for traffic matching specified DSCP
Context	configure qos sap-ingress qos-policy-name dscp keyword fc sap-ingress-fc-name
Tree	fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be l2 af l1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *keyword*

Synopsis	Priority for the packet
Context	configure qos sap-ingress qos-policy-name dscp keyword priority keyword
Tree	priority
Options	low, high, auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [fc-name] sap-ingress-fc-name

Synopsis	Enter the fc list instance
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name
Tree	fc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fc-name] sap-ingress-fc-name

Synopsis	Forwarding class (and optional subclass) name
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name
Tree	fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be 2 af 1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast-policer *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name broadcast-policer number

Tree	broadcast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast-queue *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> broadcast-queue <i>reference</i>
Tree	broadcast-queue
Reference	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast-queue-group-queue

Synopsis	Enable the broadcast-queue-group-queue context
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> broadcast-queue-group-queue
Tree	broadcast-queue-group-queue
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> broadcast-queue-group-queue queue <i>reference</i>
Tree	queue

Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name broadcast-queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

de-1-out-profile *boolean*

Synopsis	Frames with DE value to be assigned as out of profile
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name de-1-out-profile <i>boolean</i>
Tree	de-1-out-profile
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-fc *keyword*

Synopsis	Forwarding class for egress QoS processing
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name egress-fc <i>keyword</i>
Tree	egress-fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority)

	h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group-broadcast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> fp-redirect-group-broadcast-policer
Tree	fp-redirect-group-broadcast-policer
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group-multicast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> fp-redirect-group-multicast-policer
Tree	fp-redirect-group-multicast-policer
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> fp-redirect-group-policer
Tree	fp-redirect-group-policer
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group-unknown-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> fp-redirect-group-unknown-policer
Tree	fp-redirect-group-unknown-policer
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-remark

Synopsis	Enter the in-remark context
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> in-remark
Tree	in-remark
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp keyword

Synopsis	DSCP to override DSCP bits of the matching packet
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> in-remark dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: dscp or prec .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prec number

Synopsis	Value to override precedence bits of matching packet
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Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name in-remark prec number
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-policer *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name multicast-policer number
Tree	multicast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name multicast-queue reference
Tree	multicast-queue
Reference	configure qos sap-ingress qos-policy-name queue number
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-queue-group-queue

Synopsis	Enable the multicast-queue-group-queue context
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Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name multicast-queue-group-queue
Tree	multicast-queue-group-queue
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue reference

Synopsis	Broadcast queue for packets in the forwarding class
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name multicast-queue-group-queue queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group named-item queue <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-name reference

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name multicast-queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group named-item
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-remark

Synopsis	Enter the out-remark context
Context	configure qos sap-ingress qos-policy-name fc sap-ingress-fc-name out-remark
Tree	out-remark
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

dscp keyword

Synopsis DSCP to override DSCP bits of the matching packet

Context **configure** qos sap-ingress qos-policy-name **fc** sap-ingress-fc-name out-remark **dscp** keyword

Tree **dscp**

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes The following elements are part of a choice: **dscp** or **prec**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prec number

Synopsis Value to override precedence bits of matching packet

Context **configure** qos sap-ingress qos-policy-name **fc** sap-ingress-fc-name out-remark **prec** number

Tree **prec**

Range 0 to 7

Notes The following elements are part of a choice: **dscp** or **prec**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer number

Synopsis Policer ID for unicast traffic in the forwarding class

Context **configure** qos sap-ingress qos-policy-name **fc** sap-ingress-fc-name **policer** number

Tree **policer**

Range 1 to 63

Notes The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis Packets profile associated with the forwarding class

Context **configure** [qos sap-ingress](#) *qos-policy-name* [fc sap-ingress-fc-name](#) [profile](#) *keyword*

Tree [profile](#)

Options in, out, exceed, inplus

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

queue *reference*

Synopsis Queue to assign for packets in this forwarding class

Context **configure** [qos sap-ingress](#) *qos-policy-name* [fc sap-ingress-fc-name](#) [queue](#) *reference*

Tree [queue](#)

Reference **configure** [qos sap-ingress](#) *qos-policy-name* [queue](#) *number*

Notes The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

queue-group-queue

Synopsis Enable the **queue-group-queue** context

Context **configure** [qos sap-ingress](#) *qos-policy-name* [fc sap-ingress-fc-name](#) [queue-group-queue](#)

Tree [queue-group-queue](#)

Notes The following elements are part of a choice: (**fp-redirect-group-policer** and **policer**), **queue**, or **queue-group-queue**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

queue *reference*

Synopsis Queue to assign for packets in this forwarding class

Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> queue-group-queue queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-policer *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> unknown-policer <i>number</i>
Tree	unknown-policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> unknown-queue <i>reference</i>

Tree	unknown-queue
Reference	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-queue-group-queue

Synopsis	Enable the unknown-queue-group-queue context
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> unknown-queue-group-queue
Tree	unknown-queue-group-queue
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue reference

Synopsis	Broadcast queue for packets in the forwarding class
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> unknown-queue-group-queue queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-group-name reference

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress <i>qos-policy-name</i> fc <i>sap-ingress-fc-name</i> unknown-queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos sap-ingress qos-policy-name ip-criteria
Tree	ip-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] number

Synopsis	IP criteria entry to create or edit for the policy
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number action
Tree	action

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

fc sap-ingress-fc-name

Synopsis Forwarding class for traffic matching the criteria
Context **configure** qos sap-ingress qos-policy-name ip-criteria entry number action fc sap-ingress-fc-name
Tree fc
String length 1 to 32
String format 'sap-ingress-fc-name' must be one of be|l2|af|l1|h2|ef|h1|nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority keyword

Synopsis Priority for the packet
Context **configure** qos sap-ingress qos-policy-name ip-criteria entry number action priority keyword
Tree priority
Options low, high, auto
Default auto
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

type keyword

Synopsis Action for criteria entry
Context **configure** qos sap-ingress qos-policy-name ip-criteria entry number action type keyword
Tree type
Options ignore-match, accept
Default ignore-match
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-ip

Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match dst-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match dst-ip mask ipv4-address
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match dst-port range start number

Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment *keyword*

Synopsis	Fragmented packets as the match criterion
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry number match fragment keyword
Tree	fragment
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry number match protocol (number keyword)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry number match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
String format	'ipv4-prefix-with-host-bits' must be a.b.c.d/prefix with prefix length 0..32 'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-ip mask <i>ipv4-address</i>
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ip-criteria entry number match src-port lt number
Tree	lt

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress <i>qos-policy-name</i> ip-criteria entry <i>number</i> match src-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria
Tree	ipv6-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[entry-id](#)] *number*

Synopsis	IPv6 criteria entry to create or edit for the policy
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc sap-ingress-fc-name

Synopsis	Forwarding class for traffic matching the criteria
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number action fc sap-ingress-fc-name
Tree	fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be l2 af l1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority keyword

Synopsis	Priority for the packet
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number action priority keyword
Tree	priority
Options	low, high, auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Action for criteria entry
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number action type keyword
Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-ip

Tree	dst-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address to match destination IP of the packet
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-ip mask <i>ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
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Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fragment keyword

Synopsis	Fragmented packets as the match criterion
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match fragment keyword
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv4 address to match
Context	configure qos sap-ingress <i>qos-policy-name</i> ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
String format	'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128 'ipv6-prefix-with-host-bits' must be IPv6 address/prefix with length 0..128
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address to match with source IP of the packet
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Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match src-ip mask ipv6-address
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lt *number*

Synopsis Value 'less than' assigned as match condition

Context **configure** qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port lt number

Tree lt

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

range

Synopsis Enter the **range** context

Context **configure** qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port range

Tree range

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end *number*

Synopsis Upper bound of the port range

Context **configure** qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port range end number

Tree end

Range 0 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start *number*

Synopsis Lower bound of the port range

Context	configure qos sap-ingress qos-policy-name ipv6-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-criteria

Synopsis	Enter the mac-criteria context
Context	configure qos sap-ingress qos-policy-name mac-criteria
Tree	mac-criteria
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] number

Synopsis	Entry ID
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action

Synopsis	Enter the action context
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number action
Tree	action
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc sap-ingress-fc-name

Synopsis	Forwarding class for traffic matching the criteria
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number action fc sap-ingress-fc-name
Tree	fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be l2 af l1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority keyword

Synopsis	Priority for the packet
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number action priority keyword
Tree	priority
Options	low, high, auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Action for criteria entry
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number action type keyword

Tree	type
Options	ignore-match, accept
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p

Synopsis	Enable the dot1p context
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> match dot1p
Tree	dot1p
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask number

Synopsis	3-bit mask for the 802.1p value
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match dot1p mask number
Tree	mask
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	802.1P priority value to use as the match criterion
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match dot1p priority number
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-mac

Synopsis	Enable the dst-mac context
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match dst-mac
Tree	dst-mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address mac-address

Synopsis	Destination MAC address as QoS policy match criterion
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match dst-mac address mac-address
Tree	address

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *mac-address*

Synopsis	Mask for destination MAC address
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry number match dst-mac mask <i>mac-address</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

etype *etype-value*

Synopsis	Ethernet type
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry number match etype etype-value
Tree	etype
String length	5 to 6
String format	'etype-value' must be 0x0600-0xFFFF (e-type range)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frame-type *keyword*

Synopsis	Match MAC criteria for ingress SAP QoS policy
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry number match frame- type <i>keyword</i>
Tree	frame-type
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inner-tag

Synopsis	Enable the inner-tag context
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> match inner-tag
Tree	inner-tag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask number

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> match inner-tag mask <i>number</i>
Tree	mask
Range	1 to 4095
Default	4095
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan number

Synopsis	Value to match against the VID of the second VLAN tag
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> match inner-tag vlan <i>number</i>
Tree	vlan
Range	0 to 4095
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

llc-dsap

Synopsis	Enable the llc-dsap context
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry <i>number</i> match llc-dsap
Tree	llc-dsap

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dsap *number*

Synopsis	DSAP value
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match llc-dsap dsap <i>number</i>
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	DSAP mask
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match llc-dsap mask <i>number</i>
Tree	mask
Range	0 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match llc-ssap
Tree	llc-ssap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	Source SAP mask
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Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match llc-ssap mask number
Tree	mask
Range	0 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssap number

Synopsis	SSAP value
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match llc-ssap ssap number
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outer-tag

Synopsis	Enable the outer-tag context
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match outer-tag
Tree	outer-tag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask number

Synopsis	First tag carried transparently through the service
Context	configure qos sap-ingress qos-policy-name mac-criteria entry number match outer-tag mask number
Tree	mask
Range	1 to 4095
Default	4095
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

vlan *number*

Synopsis Match against VID of the first VLAN tag in the packet carried transparently through service

Context **configure** [qos sap-ingress](#) [qos-policy-name](#) [mac-criteria entry number match outer-tag](#) [vlan number](#)

Tree [vlan](#)

Range 0 to 4095

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

snap-oui *keyword*

Synopsis Parameter snap-oui as MAC filter match criteria

Context **configure** [qos sap-ingress](#) [qos-policy-name](#) [mac-criteria entry number match snap-oui](#) [keyword](#)

Tree [snap-oui](#)

Options zero, non-zero

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

snap-pid *number*

Synopsis Parameter snap-pid as MAC filter match criteria

Context **configure** [qos sap-ingress](#) [qos-policy-name](#) [mac-criteria entry number match snap-pid](#) [number](#)

Tree [snap-pid](#)

Range 0 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

src-mac

Synopsis	Enable the src-mac context
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry number match src-mac
Tree	src-mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *mac-address*

Synopsis	Source MAC address as QoS policy match criterion
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry number match src-mac address <i>mac-address</i>
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *mac-address*

Synopsis	Mask for source MAC address
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria entry number match src-mac mask <i>mac-address</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword***WARNING:**

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

Synopsis	MAC criteria filter type
Context	configure qos sap-ingress <i>qos-policy-name</i> mac-criteria type <i>keyword</i>

Tree	type
Options	normal, vid
Default	normal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [\[policer-id\]](#) *number*

Synopsis	Enter the policer list instance
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *number*

Synopsis	SAP-ingress policer identifier
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i> arbiter-parent
Tree	arbiter-parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arbiter-name *named-item*

Synopsis	Arbiter name
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Context	configure qos sap-ingress qos-policy-name policer number arbiter-parent arbiter-name named-item
Tree	arbiter-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress qos-policy-name policer number arbiter-parent level number
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos sap-ingress qos-policy-name policer number arbiter-parent weight number
Tree	weight
Range	1 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-ingress qos-policy-name policer number cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456

Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i> high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes

Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-ingress qos-policy-name policer number packet-byte-offset number
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-ingress qos-policy-name policer number percent-rate
Tree	percent-rate
Description	<p>Commands in this context configure the policer PIR and CIR as a percentage of the actual port speed or reference bandwidth, as opposed to absolute rate values. The reference bandwidth is configured on a per-port basis using the configure port ethernet ingress-reference-bw command and overrides the actual port speed. If the reference bandwidth is modified, the PIR and CIR are recalculated based on the new bandwidth and the configured percentage values.</p> <p>This command is mutually exclusive with the rate command used to specify absolute rate values for the policer. Configuring one removes the existing configuration of the other.</p>
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	Administrative CIR percent
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Context	configure qos sap-ingress qos-policy-name policer number percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	Administrative PIR percent
Context	configure qos sap-ingress qos-policy-name policer number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate keyword

Synopsis	Reference rate
Context	configure qos sap-ingress qos-policy-name policer number percent-rate reference-rate keyword
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile-capped boolean

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	configure qos sap-ingress qos-policy-name policer number profile-capped boolean
Tree	profile-capped
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

rate

Synopsis Enter the **rate** context

Context **configure** qos sap-ingress qos-policy-name policer number rate

Tree rate

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir (number | keyword)

Synopsis Administrative CIR

Context **configure** qos sap-ingress qos-policy-name policer number rate cir (number | keyword)

Tree cir

Range 0 to 6400000000

Units kilobps

Options max

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir (number | keyword)

Synopsis Administrative PIR

Context **configure** qos sap-ingress qos-policy-name policer number rate pir (number | keyword)

Tree pir

Range 1 to 6400000000

Units kilobps

Options max

Default max

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, offered-profile-with-discards, ecn-codepoints, ecn-marked
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-id *number***WARNING:**

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

Synopsis	Ingress SAP QoS policy ID
Context	configure qos sap-ingress <i>qos-policy-name</i> policy-id <i>number</i>
Tree	policy-id
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prec [[prec-value](#)] *number*

Synopsis	Enter the prec list instance
Context	configure qos sap-ingress <i>qos-policy-name</i> prec <i>number</i>
Tree	prec
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prec-value] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos sap-ingress <i>qos-policy-name</i> prec <i>number</i>
Tree	prec

Range	0 to 7
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *sap-ingress-fc-name*

Synopsis	Forwarding class for traffic matching precedence value
Context	configure qos sap-ingress <i>qos-policy-name</i> prec <i>number</i> fc <i>sap-ingress-fc-name</i>
Tree	fc
String length	1 to 32
String format	'sap-ingress-fc-name' must be one of be l2 af l1 h2 ef h1 nc with optional .sub-name (e.g. be or ef.my-sub)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *keyword*

Synopsis	Priority for the matching traffic
Context	configure qos sap-ingress <i>qos-policy-name</i> prec <i>number</i> priority <i>keyword</i>
Tree	priority
Options	low, high, auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [*queue-id*] *number*

Synopsis	Enter the queue list instance
Context	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *number*

Synopsis	SAP-ingress policer identifier
Context	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos sap-ingress qos-policy-name queue number drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure qos sap-ingress qos-policy-name queue number drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos sap-ingress qos-policy-name queue number drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	configure qos sap-ingress qos-policy-name queue number mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes

Options	auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipoint *boolean*



WARNING:

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

Synopsis	Apply as a multicast queue
Context	configure qos sap-ingress <i>qos-policy-name</i> queue number multipoint <i>boolean</i>
Tree	multipoint
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	configure qos sap-ingress <i>qos-policy-name</i> queue number packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 30
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-ingress <i>qos-policy-name</i> queue number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir decimal-number

Synopsis	Administrative CIR percent
Context	configure qos sap-ingress qos-policy-name queue number percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fir decimal-number

Synopsis	Administrative FIR percent
Context	configure qos sap-ingress qos-policy-name queue number percent-rate fir decimal-number
Tree	fir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	Administrative PIR percent
Context	configure qos sap-ingress qos-policy-name queue number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	configure qos sap-ingress qos-policy-name queue number percent-rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate keyword

Synopsis	Reference rate
Context	configure qos sap-ingress qos-policy-name queue number percent-rate reference-rate keyword
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-mode keyword



WARNING:

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

Synopsis	Operating mode for this queue
Context	configure qos sap-ingress qos-policy-name queue number queue-mode keyword
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-type keyword**WARNING:**

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

Synopsis	Method used to service queue from hardware perspective
Context	configure qos sap-ingress qos-policy-name queue number queue-type keyword
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos sap-ingress qos-policy-name queue number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (number | keyword)

Synopsis	Administrative CIR
Context	configure qos sap-ingress qos-policy-name queue number rate cir (number keyword)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fir (*number* | *keyword*)

Synopsis	Administrative FIR
Context	configure qos sap-ingress qos-policy-name queue number rate fir (<i>number</i> <i>keyword</i>)
Tree	fir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-ingress qos-policy-name queue number rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

police

Synopsis	Drop the traffic feeding into queue above the PIR rate
Context	configure qos sap-ingress qos-policy-name queue number rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos sap-ingress qos-policy-name queue number scheduler-parent
Tree	scheduler-parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress qos-policy-name queue number scheduler-parent cir-level number
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-ingress qos-policy-name queue number scheduler-parent cir-weight number
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress qos-policy-name queue number scheduler-parent level number
Tree	level

Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-name *named-item*

Synopsis	Scheduler name
Context	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i> scheduler-parent scheduler-name <i>named-item</i>
Tree	scheduler-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope *keyword*

Synopsis	Scope of the policy
Context	configure qos sap-ingress <i>qos-policy-name</i> scope <i>keyword</i>
Tree	scope
Options	exclusive – Allow policy to be assigned to only one port template – Allow policy to be assigned to multiple ports
Default	template
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

scheduler-policy [[scheduler-policy-name](#)] *named-item*

Synopsis Enter the **scheduler-policy** list instance

Context **configure** [qos scheduler-policy](#) *named-item*

Tree [scheduler-policy](#)

Max. instances 2047

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[scheduler-policy-name] *named-item*

Synopsis Scheduler policy name

Context **configure** [qos scheduler-policy](#) *named-item*

Tree [scheduler-policy](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [qos scheduler-policy](#) *named-item* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

frame-based-accounting *boolean*

Synopsis	Use frame-based accounting for queues and schedulers
Context	configure qos scheduler-policy <i>named-item</i> frame-based-accounting <i>boolean</i>
Tree	frame-based-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tier [*tier-id*] *number*

Synopsis	Enter the tier list instance
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i>
Tree	tier
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[tier-id] *number*

Synopsis	Tier for scheduler-policy scheduler
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i>
Tree	tier
Range	1 to 3
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent-location *keyword*

Synopsis	Expected location of parent schedulers
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> parent-location <i>keyword</i>
Tree	parent-location
Options	auto, sub, vport
Default	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis Enter the **scheduler** list instance

Context **configure** [qos scheduler-policy](#) *named-item* [tier](#) *number* [scheduler](#) *named-item*

Tree [scheduler](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis Scheduler name

Context **configure** [qos scheduler-policy](#) *named-item* [tier](#) *number* [scheduler](#) *named-item*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> <i>description</i> <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*keyword* | *decimal-number*)

Synopsis	Scheduler CIR
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> percent-rate cir (<i>keyword</i> <i>decimal-number</i>)
Tree	cir
Range	0.00 to 100.00
Options	sum

Default	sum
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	Scheduler PIR
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	reference-port-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-parent

Synopsis	Enable the port-parent context
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> port-parent
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Weight used at the above-CIR port priority level
----------	--

Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> port-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Default	sum
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir

Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> scheduler-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-name *named-item*

Synopsis	Scheduler name
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> scheduler-parent scheduler-name <i>named-item</i>
Tree	scheduler-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure qos scheduler-policy <i>named-item</i> tier <i>number</i> scheduler <i>named-item</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.23 redundancy commands

```

configure
- redundancy
-   apply-groups reference
-   apply-groups-exclude reference
-   bgp-evpn
-   ethernet-segment
-   activation-timer number
-   apply-groups reference
-   apply-groups-exclude reference
-   boot-timer number
-   bgp-mh
-   apply-groups reference
-   apply-groups-exclude reference
-   site
-   activation-timer number
-   boot-timer number
-   min-down-timer number
-   cert-sync boolean
-   mgmt-ethernet
-   revert number
-   multi-chassis
-   ipsec-domain number
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   designated-role keyword
-   priority number
-   revertive boolean
-   tunnel-group reference
-   peer (ipv4-address-no-zone | ipv6-address-no-zone)
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   authentication-key encrypted-leaf
-   description description
-   mc-endpoint
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   bfd boolean
-   boot-timer number
-   hold-on-neighbor-failure number
-   keep-alive-interval number
-   passive-mode boolean
-   system-priority number
-   mc-ipsec
-   apply-groups reference
-   apply-groups-exclude reference
-   bfd-liveness boolean
-   discovery-interval
-   boot number
-   interval-secs number
-   domain reference
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   hold-on-neighbor-failure number
-   keep-alive-interval number
-   tunnel-group reference

```

configure redundancy multi-chassis peer mc-ipsec tunnel-group admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **peer-group** *number*
- **priority** *number*
- **mc-lag**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-on-neighbor-failure** *number*
 - **keep-alive-interval** *number*
 - **lag** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **lacp-key** *number*
 - **remote-lag** *lag-interface*
 - **system-id** *mac-address*
 - **system-priority** *number*
- **mc-ring**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ring** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **in-band-control-path**
 - **debounce** *boolean*
 - **dst-ip** *ipv4-unicast-address*
 - **interface** *interface-name*
 - **max-debounce-time** *number*
 - **service-name** *service-name*
 - **path-b**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *number end* *number*
 - **wildcard-saps** *boolean*
 - **path-excl**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *number end* *number*
 - **wildcard-saps** *boolean*
 - **ring-node** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dst-ip** *ipv4-unicast-address*
 - **interval** *number*
 - **service-name** *service-name*
 - **src-ip** *ipv4-unicast-address*
 - **src-mac** (*keyword* | *ring-node-mac-address*)
 - **vlan** *ext-vlan-encap*
 - **type** *keyword*
- **peer-name** *named-item*
- **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **sync**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipsec** *boolean*
 - **l2tp** *boolean*
 - **local-dhcp-server** *boolean*
 - **mc-ring** *boolean*
 - **tags**
 - **lag** *reference*

configure redundancy multi-chassis peer sync tags lag apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **range start** *vlan-encap* **end** *vlan-encap*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *named-item*
- **sync-tag** *named-item*
- **port** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *vlan-encap* **end** *vlan-encap*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *named-item*
 - **sync-tag** *named-item*
- **sdp** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *number* **end** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *named-item*
 - **sync-tag** *named-item*
- **transport-encryption**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **keychain** *reference*
- **tunnel-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *named-item*
- **rollback-sync** *keyword*
- **switchover-exec** *url*
- **synchronize** *keyword*

4.23.1 redundancy command descriptions

redundancy

Synopsis	Enter the redundancy context
Context	configure redundancy
Tree	redundancy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure redundancy bgp-evpn
Tree	bgp-evpn
Description	Commands in this context configure BGP-EVPN global timers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ethernet-segment

Synopsis	Enter the ethernet-segment context
Context	configure redundancy bgp-evpn ethernet-segment
Tree	ethernet-segment
Description	Commands in this context configure redundancy for ES applications.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activation-timer *number*

Synopsis	Global ES activation timer
Context	configure redundancy bgp-evpn ethernet-segment activation-timer <i>number</i>
Tree	activation-timer
Description	This command configures the global ES activation timer. This timer delays the activation of a specified ES on a PE that has been elected as the DF. The SAP or SDP binding

associated to an ES is activated (in case of single-active multihoming) or added to the default multicast list (in case of all-active multihoming) only when this timer has expired.

The **configure service system bgp evpn ethernet-segment df-election es-activation-timer** command configuration at the ES-level supersedes this global ES activation timer.

Range	0 to 100
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-timer *number*

Synopsis	Time before BGP EVPN multihoming DF election algorithm
Context	configure redundancy bgp-evpn ethernet-segment boot-timer <i>number</i>
Tree	boot-timer
Description	<p>This command allows the necessary time for the control plane protocols to come up on PE boot-up before bringing up the ESs and running the DF algorithm.</p> <p>The following considerations apply to this command:</p> <ul style="list-style-type: none"> • The boot timer duration provide enough time to allow the IOMs and BGP sessions to come up before exchanging ES routes and running the DF election for each EVI or ISID. • The boot timer is synchronized across CPMs and is relative to the system uptime; it is not changed or reset on CPM switchover. • The boot timer is never interrupted (the es-activation-timer, however, can be interrupted if there is a new event triggering the DF election). • The boot timer runs per EVI or ISID on the ESs in the system. If the system uptime (time the system has been up since the last reboot) is less than the timer value, the system does not run the DF election for any EVI or ISID. When the boot timer expires, the DF election runs, and if the system is elected DF for the EVI or ISID, the es-activation-timer is triggered. • The system does not advertise ES routes until the boot timer expires, which guarantees that the peer ES PEs only run the DF election when the PE is ready to become the DF, if required.
Range	0 to 1800
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-mh

Synopsis	Enter the bgp-mh context
Context	configure redundancy bgp-mh
Tree	bgp-mh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

site

Synopsis	Enter the site context
Context	configure redundancy bgp-mh site
Tree	site
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activation-timer *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	configure redundancy bgp-mh site activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Units	seconds
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure redundancy bgp-mh site boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Units	seconds
Default	10

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-down-timer *number*

Synopsis	Min downtime for BGP multi-homing site after transition
Context	configure redundancy bgp-mh site min-down-timer <i>number</i>
Tree	min-down-timer
Description	<p>This command configures the BGP multi-homing site minimum down time. When this value is set and the site goes operationally down, it remains operationally down for at least the length of time configured by this timer, regardless of whether other state changes might cause the site to go operationally up. This timer is restarted every time the site transitions from operationally up to down.</p> <p>This timer is optimized in the following circumstances:</p> <ul style="list-style-type: none">• If the site goes down on the DF but there are no BGP multi-homing peers with the same site in an up state, this timer is not used.• If the site goes down on the DF but there are no active BGP multi-homing peers, this timer is not used.• If this timer is active and a BGP multihoming update is received from the DF indicating its site is down, this timer is immediately terminated and the BGP multihoming algorithm is triggered to determine whether this PE should become the DF.
Range	1 to 100
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-sync *boolean*

Synopsis	Automatically synchronize certificate files
Context	configure redundancy cert-sync <i>boolean</i>
Tree	cert-sync
Description	When configured to true , the system automatically synchronizes the certificate/CRL/key when importing or generating (for the key). If a new CF card is inserted into cf3: into the backup CPM, the system synchronizes the system-pki directory from the active CPM.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mgmt-ethernet

Synopsis	Enable the mgmt-ethernet context
Context	configure redundancy mgmt-ethernet
Tree	mgmt-ethernet
Description	Commands in this context configure the active CPM or CPIOM to use the management Ethernet port of the standby CPM or CPIOM if the management Ethernet port on the active CPM or CPIOM goes down.
Introduced	25.3.R2
Platforms	7705 SAR-10x

revert *number*

Synopsis	Time before reverting the management Ethernet port
Context	configure redundancy mgmt-ethernet revert <i>number</i>
Tree	revert
Description	This command allows the administrator to control when to revert to the management Ethernet port of the primary CPM or CPIOM after it comes up again.
Range	1 to 300
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR-10x

multi-chassis

Synopsis	Enter the multi-chassis context
Context	configure redundancy multi-chassis
Tree	multi-chassis
Description	Commands in this context configure the attributes of multi-chassis redundancy.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec-domain [[id](#)] *number*

Synopsis	Enter the ipsec-domain list instance
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Context	configure <i>redundancy multi-chassis ipsec-domain</i> <i>number</i>
Tree	<i>ipsec-domain</i>
Description	Commands in this context configure an IPsec domain used for N:M IPsec redundancy.
Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	IPsec domain ID
Context	configure <i>redundancy multi-chassis ipsec-domain</i> <i>number</i>
Tree	<i>ipsec-domain</i>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	configure <i>redundancy multi-chassis ipsec-domain</i> <i>number</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

designated-role *keyword*



WARNING:

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

Synopsis	Designated role for the IPsec domain
Context	configure <i>redundancy multi-chassis ipsec-domain</i> <i>number</i> <i>designated-role</i> <i>keyword</i>

Tree	designated-role
Description	This command configures the designated role of the tunnel group in the IPsec domain.
Options	standby, active
Default	standby
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

priority *number*

Synopsis	Priority for the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> priority <i>number</i>
Tree	priority
Description	This command configures the priority for the tunnel group in the IPsec domain. The node with the higher priority is more likely to be elected as active within the domain.
Range	0 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

revertive *boolean*



WARNING:

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

Synopsis	Enable revertive behavior for the tunnel group
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> revertive <i>boolean</i>
Tree	revertive
Description	<p>When configured to true, the router enables the revertive behavior of the tunnel group, which allows a router in an N:M domain to automatically take over as the active router in the domain when it becomes eligible to do so.</p> <p>When configured to false, the revertive behavior of the tunnel group is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-group *reference***WARNING:**

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

Synopsis	Tunnel group ID for an IPsec domain
Context	configure <i>redundancy multi-chassis ipsec-domain number tunnel-group reference</i>
Tree	<i>tunnel-group</i>
Description	This command specifies the tunnel group ID for the IPsec domain.
Reference	configure <i>isa tunnel-group number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Enter the peer list instance
Context	configure <i>redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>peer</i>
Description	This command configures the IP address of the peer in a redundant multi-chassis setup, and enters the context for further application-specific configuration options.
Max. instances	20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Peer IP address
Context	configure <i>redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>peer</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MC redundancy peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf***WARNING:**

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

Synopsis	Authentication key used between the node and MC peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the authentication key used between the node and MC peer in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 110
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>description</i>
Tree	description
String length	1 to 80

String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-endpoint

Synopsis	Enable the mc-endpoint context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-endpoint
Tree	mc-endpoint
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MC-EP
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-endpoint admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd *boolean*

Synopsis	Enable BFD detection for the MC-EP peering tunnel
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-endpoint bfd <i>boolean</i>
Tree	bfd
Description	<p>When configured to true, the system uses Bidirectional Forwarding Detection (BFD) to control the state of the associated protocol interface, where the state of the protocol interface is tied to the state of the BFD session between the local and remote nodes.</p> <p>The BFD settings are configured in the IP interface contexts.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

boot-timer *number*

Synopsis	Time to attempt connection before declaring failure
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-endpoint boot-timer <i>number</i>
Tree	boot-timer
Description	This command configures the time interval to attempt connection that applies after the node reboots. This command specifies the time the multi-chassis endpoint (MC-EP) protocol takes to establish a connection before declaring a connection failure with the remote peer. When the time interval expires, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	1 to 600
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-on-neighbor-failure *number*

Synopsis	Number of keepalive intervals to wait for packets
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-endpoint hold-on-neighbor-failure <i>number</i>
Tree	hold-on-neighbor-failure
Description	This command configures the number of keepalive intervals that the local node waits for packets from the MC-EP peer before declaring a connection failure. When the number of intervals is reached, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	2 to 25
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keep-alive-interval *number*

Synopsis	Interval for exchange of keepalive messages
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Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Description	This command configures the interval for which keepalive messages are exchanged between two systems participating as MC-EP when BFD is not active. The fast keepalive messages are used to detect remote node failure.
Range	5 to 500
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive-mode *boolean*

Synopsis	Enable passive mode for the MC-EP tunnel
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint passive-mode <i>boolean</i>
Tree	passive-mode
Description	<p>When configured to true, the system enables passive mode behavior for the MC-EP protocol. Assuming the remote pair is configured with regular MC-EP in passive mode, the MC-EP pair remains dormant until two of the pseudowires in an MC-EP are activated by the remote PEs.</p> <p>When one pseudowire is active, the dormant MC-EP pair becomes active. The regular mechanism to select the best pseudowire between the active pair is initiated, and the system blocks the Rx and Tx directions of the other pseudowire.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-priority *number*

Synopsis	System priority of the MC-EP
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint system-priority <i>number</i>
Tree	system-priority
Description	This command configures the system priority of the MC-EP. The peer configured with the lower value is selected as the master. If the system priority values are equal, the peer with the higher system ID (chassis MAC address) becomes the master.
Range	0 to 255

Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-ipsec

Synopsis	Enable the mc-ipsec context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec
Tree	mc-ipsec
Description	Commands in this context configure the 1:1 and N:M MC-IPsec multi-chassis state failover mechanism that allows the IPsec tunnel to continue to function without interruption if an active node fails.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

discovery-interval

Synopsis	Enter the discovery-interval context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec discovery-interval
Tree	discovery-interval
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

boot *number*

Synopsis	Maximum interval after system bootup
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec discovery-interval boot <i>number</i>
Tree	boot
Range	1 to 1800
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval-secs *number*

Synopsis	Maximum discovery interval
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec discovery-interval interval-secs <i>number</i>
Tree	interval-secs
Range	1 to 1800
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

domain [[id](#)] *reference*

Synopsis	Enter the domain list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec domain <i>reference</i>
Tree	domain
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[[id](#)] *reference*

Synopsis	IPsec domain ID
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Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec domain <i>reference</i>
Tree	domain
Reference	configure redundancy multi-chassis ipsec-domain <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec domain <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

hold-on-neighbor-failure *number*

Synopsis	Hold time on neighbor failure
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec hold-on-neighbor-failure <i>number</i>
Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keep-alive-interval *number*

Synopsis	Keepalive interval
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec keep-alive-interval <i>number</i>
Tree	keep-alive-interval

Range	5 to 500
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Enter the tunnel-group list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec tunnel-group reference
Tree	tunnel-group
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[tunnel-group-id] *reference*

Synopsis	Tunnel group ID
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec tunnel-group reference
Tree	tunnel-group
Reference	configure isa tunnel-group number
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the peer IPsec tunnel group
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ipsec tunnel-group reference admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

peer-group *number*



WARNING:

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

Synopsis Peer tunnel group

Context **configure** [redundancy multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [peer-group number](#)

Tree [peer-group](#)

Range 1 to 64

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

priority *number*

Synopsis Tunnel group priority

Context **configure** [redundancy multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [priority number](#)

Tree [priority](#)

Description This command configures the 1:1 MC-IPsec local priority for the tunnel group. The priority configuration is one of the factors used to select the active node between MC peers for the tunnel group. The node that has the tunnel group with the higher priority value is more likely to be elected as the active node.

Range 0 to 255

Default 100

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mc-lag

Synopsis Enter the **mc-lag** context

Context **configure** [redundancy multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-lag](#)

Tree [mc-lag](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of MC-LAG

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-lag admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hold-on-neighbor-failure *number*

Synopsis Time to wait for packets before node failure assumed

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-lag hold-on-neighbor-failure](#) *number*

Tree [hold-on-neighbor-failure](#)

Range 2 to 25

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

keep-alive-interval *number*

Synopsis Keepalive timer value

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-lag keep-alive-interval](#) *number*

Tree [keep-alive-interval](#)

Range 5 to 500

Units deciseconds

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lag [*lag-name*] *reference*

Synopsis	Enter the lag list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag lag <i>reference</i>
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] *reference*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag lag <i>reference</i>
Tree	lag
Reference	configure lag <i>lag-interface</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lacp-key *number*

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

Synopsis	Key based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag lag <i>reference</i> lacp-key <i>number</i>
Tree	lacp-key
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-lag *lag-interface*

Synopsis	LAG name
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Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference remote-lag lag-interface
Tree	remote-lag
String length	1 to 27
String format	'lag-interface' must be lag- followed by number 1-800 or up to 23 chars (e.g. lag-1 or lag-my-lag)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *mac-address*

**WARNING:**

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

Synopsis	ID based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference system-id mac-address
Tree	system-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-priority *number*

**WARNING:**

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

Synopsis	Priority based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference system-priority number
Tree	system-priority
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-ring

Synopsis	Enter the mc-ring context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring
Tree	mc-ring
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ring [**sync-tag**] *named-item*

Synopsis	Enter the ring list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i>
Tree	ring
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**sync-tag**] *named-item*

Synopsis	Tag for synchronizing with the multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i>
Tree	ring
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the multi-chassis ring
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

in-band-control-path

Synopsis	Enter the in-band-control-path context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>named-item</i> in-band-control-path
Tree	in-band-control-path
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debounce *boolean*

Synopsis	Enable inband control path debouncing
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>named-item</i> in-band-control-path debounce <i>boolean</i>
Tree	debounce
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip *ipv4-unicast-address*

Synopsis	IP address of the in-band control path peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>named-item</i> in-band-control-path dst-ip <i>ipv4-unicast-address</i>
Tree	dst-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Interface to verify in-band control path
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> in-band-control-path interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-debounce-time *number*

Synopsis	Maximum delay after a failure when debouncing is active
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> in-band-control-path max-debounce-time <i>number</i>
Tree	max-debounce-time
Range	5 to 200
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name*

Synopsis	Administrative service name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> in-band-control-path service-name <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-b

Synopsis	Enter the path-b context
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Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-b
Tree	path-b
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range **start** *number* **end** *number*

Synopsis	Add a list entry for range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-b range start <i>number</i> end <i>number</i>
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the VLAN range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-b range start <i>number</i> end <i>number</i>
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the VLAN range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-b range start <i>number</i> end <i>number</i>
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wildcard-saps *boolean*

Synopsis	Include the SAPs starting with a wildcard **
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-b wildcard-saps <i>boolean</i>
Tree	wildcard-saps
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-excl

Synopsis	Enter the path-excl context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-excl
Tree	path-excl
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range **start** *number* **end** *number*

Synopsis	Add a list entry for range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-excl range start <i>number</i> end <i>number</i>
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the VLAN range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> path-excl range start <i>number</i> end <i>number</i>
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the VLAN range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring named-item path-excl range start number end number
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wildcard-saps boolean

Synopsis	Include the SAPs starting with a wildcard '*'
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring named-item path-excl wildcard-saps boolean
Tree	wildcard-saps
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ring-node [[name](#)] [named-item](#)

Synopsis	Enter the ring-node list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring named-item ring-node named-item
Tree	ring-node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] [named-item](#)

Synopsis	Name of the multi-chassis ring access node
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Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> ring-node <i>named-item</i>
Tree	ring-node
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the ring node verification
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> ring-node <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-ip *ipv4-unicast-address*

Synopsis	Destination IP address for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> ring-node <i>named-item</i> dst-ip <i>ipv4-unicast-address</i>
Tree	dst-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Connection verification interval
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> ring-node <i>named-item</i> interval <i>number</i>

Tree	interval
Range	1 to 6000
Units	minutes
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name*

Synopsis	Administrative service name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring named-item ring-node named-item service-name <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip *ipv4-unicast-address*

Synopsis	Source IP address for access node connection
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring named-item ring-node named-item src-ip <i>ipv4-unicast-address</i>
Tree	src-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-mac (*keyword* | *ring-node-mac-address*)

Synopsis	Source MAC address for the access node connection
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring named-item ring-node named-item src-mac (<i>keyword</i> <i>ring-node-mac-address</i>)
Tree	src-mac

Options	system-mac-address
Default	system-mac-address 00:00:00:00:00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan *ext-vlan-encap*

Synopsis	VLAN ID for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> ring-node <i>named-item</i> vlan <i>ext-vlan-encap</i>
Tree	vlan
String length	1 to 11
String format	'ext-vlan-encap' must match extended VLAN encap or 0.*
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*



WARNING:

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

Synopsis	Type of the multi-chassis ring
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>named-item</i> type <i>keyword</i>
Tree	type
Options	layer-2, layer-3
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-name *named-item*

Synopsis	Multi-chassis peer name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) peer-name <i>named-item</i>

Tree	peer-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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



WARNING:

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

Synopsis	Source address to communicate with the MC peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync

Synopsis	Enable the sync context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync
Tree	sync
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the peer synchronization
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ipsec *boolean*

Synopsis Synchronize IPsec information

Context **configure** [redundancy multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync ipsec boolean](#)

Tree [ipsec](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

l2tp *boolean*

Synopsis Synchronize Layer Two Tunnel Protocol (L2TP)

Context **configure** [redundancy multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync l2tp boolean](#)

Tree [l2tp](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

local-dhcp-server *boolean*

Synopsis Synchronize DHCP Server information

Context **configure** [redundancy multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync local-dhcp-server boolean](#)

Tree [local-dhcp-server](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mc-ring *boolean*

Synopsis Synchronize ring information

Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync mc-ring boolean
Tree	mc-ring
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tags

Synopsis	Enter the tags context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags
Tree	tags
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag <i>reference</i>
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[lag-name](#)] *reference*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag <i>reference</i>
Tree	lag
Reference	configure lag <i>lag-interface</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range *start* *vlan-encap* **end** *vlan-encap*

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags lag <i>reference</i> range start <i>vlan-encap</i> end <i>vlan-encap</i>
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *vlan-encap*

Synopsis	First encapsulation value
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags lag <i>reference</i> range start <i>vlan-encap</i> end <i>vlan-encap</i>
Tree	range
String length	1 to 11
String format	'vlan-encap' must be Q-tag or dot1q form (0-4094 or 1-4094.0-4094 or *)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *vlan-encap*

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags lag <i>reference</i> range start <i>vlan-encap</i> end <i>vlan-encap</i>
Tree	range
String length	1 to 11
String format	'vlan-encap' must be Q-tag or dot1q form (0-4094 or 1-4094.0-4094 or *)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*

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

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference range start</i> <i>vlan-encap end</i> <i>vlan-encap</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*

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

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags lag <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [*id*] *reference*

Synopsis	Enter the port list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags port <i>reference</i>
Tree	port

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *reference*

Synopsis	ID of port to be synchronized with multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference
Tree	port
Reference	configure port <i>port</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range start *vlan-encap end* *vlan-encap*

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start <i>vlan-encap end</i> <i>vlan-encap</i>
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *vlan-encap*

Synopsis	First encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start <i>vlan-encap end</i> <i>vlan-encap</i>
Tree	range
String length	1 to 11
String format	'vlan-encap' must be Q-tag or dot1q form (0-4094 or 1-4094.0-4094 or *)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end vlan-encap

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start vlan-encap end vlan-encap
Tree	range
String length	1 to 11
String format	'vlan-encap' must be Q-tag or dot1q form (0-4094 or 1-4094.0-4094 or *)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag named-item**WARNING:**

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

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start vlan-encap end vlan-encap sync-tag named-item
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag named-item**WARNING:**

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

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference sync-tag named-item

Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp [[id](#)] *number*

Synopsis	Enter the sdp list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number
Tree	sdp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	ID of SDP to be synchronized with multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range [start number](#) [end number](#)

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number range start number end number
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	First virtual circuit ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp <i>number</i> range start <i>number</i> end <i>number</i>
Tree	range
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Last virtual circuit ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp <i>number</i> range start <i>number</i> end <i>number</i>
Tree	range
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*



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

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags sdp <i>number</i> range start <i>number</i> end <i>number</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sync-tag *named-item*



WARNING:

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

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags sdp number sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transport-encryption

Synopsis	Enter the transport-encryption context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption
Tree	transport-encryption
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

application [[application-id](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption application <i>keyword</i>
Tree	application
Description	Commands in this context configure the MCS application for transport encryption. The application-id configures an application and a keychain defines the key used for the encryption.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[application-id] keyword

Synopsis	Application using transport encryption
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption application <i>keyword</i>
Tree	application
Description	This command configures an MCS application for the transport encryption method.
Options	igmp, igmp-snooping, sub-mgmt-ipoe, srrp, mc-ring, mld-snooping, dhcp-server, sub-host-trk, sub-mgmt-pppoe, ipsec, mld, python, l2tp, diam-proxy, pim-snp-g-sap, pim-snp-g-sdp, diam-node, nat, sub-mgmt-wlan-gw
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keychain reference

Synopsis	Keychain containing the authentication keys
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption application <i>keyword</i> keychain <i>reference</i>
Tree	keychain
Description	This command specifies a keychain that contains authentication keys for the application.
Reference	configure system security keychains keychain <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-group [tunnel-group-id] number

Synopsis	Enter the tunnel-group list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tunnel-group <i>number</i>
Tree	tunnel-group
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[tunnel-group-id] *number*

Synopsis	Multi-active tunnel group ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tunnel-group <i>number</i>
Tree	tunnel-group
Range	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

sync-tag *named-item*

Synopsis	Tag to synchronize the tunnel group with the MC peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tunnel-group <i>number</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

rollback-sync *keyword*

Synopsis	Automatic synchronization of rollback checkpoint files
Context	configure redundancy rollback-sync <i>keyword</i>
Tree	rollback-sync
Description	This command configures the automatic synchronization of locally saved rollback checkpoint files between the active and standby CPMs or CPIOMs.
Options	rollback-single – Copy only the newest rollback checkpoint file rollback-all – Copy all rollback checkpoint files
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

switchover-exec *url*

Synopsis	CLI script file executed after a redundancy switchover
Context	configure redundancy switchover-exec <i>url</i>
Tree	switchover-exec
Description	<p>This command specifies the location and name of the CLI script file executed following a redundancy switchover from the previously active CPM or CPIOM card. A switchover can happen because of a fatal failure or by manual action.</p> <p>The CLI script file can contain commands for environment settings, classic CLI debug configuration (excluding mirroring settings), and other commands not maintained by the configuration redundancy.</p> <p>The following commands are not supported in the switchover-exec file: clear, configure, candidate, oam, tools, ping, traceroute, mstat, mtrace, and mrinfo.</p>
String length	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

synchronize *keyword*

Synopsis	Behavior for automatic redundancy synchronization
Context	configure redundancy synchronize <i>keyword</i>
Tree	synchronize
Description	<p>This command specifies the behavior for the automatic synchronization of system files on the active CPM or CPIOM to the standby CPM or CPIOM.</p> <p>This command does not apply to rollback checkpoint files; use the configure redundancy rollback-sync command to configure automatic synchronization for rollback checkpoint files.</p>
Options	<p>off – Disable synchronization</p> <p>config – Synchronize the configuration files</p> <p>boot-env – Synchronize all files required for the boot process</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.24 router commands

```

configure
- router named-item-64
- aggregates
- aggregate (ipv4-prefix | ipv6-prefix)
- aggregator
- address ipv4-unicast-address
- as-number number
- apply-groups reference
- apply-groups-exclude reference
- as-set boolean
- blackhole
- generate-icmp boolean
- community community
- description description
- discard-component-communities boolean
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
- local-preference number
- policy reference
- summary-only boolean
- tunnel-group number
- apply-groups reference
- apply-groups-exclude reference
- allow-bgp-to-igp-export boolean
- allow-icmp-redirect boolean
- allow-icmp6-redirect boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bgp
- add-paths
- evpn
- receive boolean
- send (number | keyword)
- ipv4
- receive boolean
- send (number | keyword)
- ipv6
- receive boolean
- send (number | keyword)
- label-ipv4
- receive boolean
- send (number | keyword)
- label-ipv6
- receive boolean
- send (number | keyword)
- vpn-ipv4
- receive boolean
- send (number | keyword)
- vpn-ipv6
- receive boolean
- send (number | keyword)
- admin-state keyword
- advertise-external
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- advertise-inactive boolean
- advertise-ipv6-next-hops

```

configure router bgp advertise-ipv6-next-hops evpn

```

- evpn boolean
- ipv4 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- aggregator-id-zero boolean
- apply-groups reference
- apply-groups-exclude reference
- asn-4-byte boolean
- authentication-key encrypted-leaf
- authentication-keychain reference
- backup-path
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
- best-path-selection
  - always-compare-med
    - med-value keyword
    - strict-as boolean
  - as-path-ignore
    - ipv4 boolean
    - ipv6 boolean
    - l2-vpn boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - mcast-ipv4 boolean
    - mcast-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - compare-origin-validation-state boolean
  - d-path-length-ignore boolean
  - deterministic-med boolean
- ebgp-ibgp-equal
  - evpn boolean
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- ignore-nh-metric boolean
- ignore-router-id
  - include-internal
- origin-invalid-unusable boolean
- bfd-liveness boolean
- bfd-strict-mode
  - advertise
    - holdtime number
  - next-hop-reachability boolean
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value number
- bgp-tunnel-preference number
- block-prefix-sid boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id ipv4-address
  - orr-location number
- connect-retry number
- convergence

```

configure router bgp convergence family

- **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-wait-to-advertise** *number*
 - **min-wait-to-advertise** *number*
- **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **damping** *boolean*
- **def-recv-evpn-encap** *keyword*
- **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **description** *description*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
- **egress-peer-engineering**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **enforce-first-as** *boolean*
- **error-handling**
 - **legacy-mode** *boolean*
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **vpn-ipv4** *boolean*
- **family**
 - **bgp-ls** *boolean*
 - **evpn** *boolean*
 - **flow-ipv6** *boolean*
 - **flow-vpn-ipv4** *boolean*
 - **flow-vpn-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **ms-pw** *boolean*
 - **route-target** *boolean*
 - **sr-policy-ipv4** *boolean*
 - **sr-policy-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
 - **fast-external-failover** *boolean*
 - **graceful-restart**

configure router bgp graceful-restart gr-notification

- **gr-notification** *boolean*
- **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
- **restart-time** *number*
- **stale-routes-time** *number*
- **group** *named-item-64*
 - **add-paths**
 - **evpn**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **vpn-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **vpn-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **admin-state** *keyword*
 - **advertise-inactive** *boolean*
 - **advertise-ipv6-next-hops**
 - **evpn** *boolean*
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
 - **aggregator-id-zero** *boolean*
 - **aigp** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-override** *boolean*
 - **asn-4-byte** *boolean*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **bfd**
 - **multiplier** *number*
 - **receive-interval** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **bfd-liveness** *boolean*
 - **bfd-strict-mode**
 - **advertise**
 - **holdtime** *number*

configure router bgp group bfd-strict-mode next-hop-reachability

```

- next-hop-reachability boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id ipv4-address
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description description
- dynamic-neighbor
  - interface interface-name
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference
    - max-sessions number
  - match
    - prefix (ipv4-prefix | ipv6-prefix)
      - allowed-peer-as string
      - apply-groups reference
      - apply-groups-exclude reference
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- egress-peer-engineering-label-unicast boolean
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- extended-nh-encoding
  - ipv4 boolean
  - label-ipv4 boolean
  - vpn-ipv4 boolean
- family
  - bgp-ls boolean
  - evpn boolean
  - flow-ipv6 boolean
  - flow-vpn-ipv4 boolean
  - flow-vpn-ipv6 boolean
  - ipv4 boolean
  - ipv6 boolean

```

configure router bgp group family l2-vpn

```

- l2-vpn boolean
- label-ipv4 boolean
- label-ipv6 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- mcast-vpn-ipv4 boolean
- mcast-vpn-ipv6 boolean
- mdt-safi boolean
- ms-pw boolean
- route-target boolean
- sr-policy-ipv4 boolean
- sr-policy-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- fast-external-failover boolean
- graceful-restart
  - gr-notification boolean
  - long-lived
    - advertise-stale-to-all-neighbors boolean
    - advertised-stale-time number
    - family keyword
      - advertised-stale-time number
      - apply-groups reference
      - apply-groups-exclude reference
      - helper-override-stale-time number
    - forwarding-bits-set keyword
    - helper-override-restart-time number
    - helper-override-stale-time number
    - without-no-export boolean
  - restart-time number
  - stale-routes-time number
- hold-time
  - minimum-hold-time number
  - seconds number
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - send-to-ebgp

```

configure router bgp group link-bandwidth send-to-ebgp ipv4

```

    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
  - local-as
    - as-number number
    - prepend-global-as boolean
    - private boolean
  - local-preference number
  - loop-detect keyword
  - loop-detect-threshold number
  - med-out (number | keyword)
  - min-route-advertisement number
  - multihop number
  - multipath-eligible boolean
  - next-hop-self boolean
  - next-hop-unchanged
    - evpn boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - origin-validation
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
  - outbound-route-filtering
    - extended-community
      - accept-orf boolean
      - send-orf
        - route-target named-item
    - passive boolean
  - path-mtu-discovery boolean
  - peer-as number
  - peer-ip-tracking boolean
  - preference number
  - prefix-limit keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hold-excess number
    - idle-timeout number
    - log-only boolean
    - maximum number
    - post-import boolean
    - threshold number
  - remove-private
    - limited boolean
    - replace boolean
    - skip-peer-as boolean
  - selective-label-ipv4-install boolean
  - send-communities
    - extended boolean
    - large boolean
    - standard boolean
  - send-default
    - export-policy reference
    - ipv4 boolean
    - ipv6 boolean
  - split-horizon boolean
  - static-group boolean

```

configure router bgp group tcp-mss

```

- tcp-mss (number | keyword)
- third-party-nexthop boolean
- ttl-security number
- type keyword
- vpn-apply-export boolean
- vpn-apply-import boolean
- hold-time
- minimum-hold-time number
- seconds number
- ibgp-multipath boolean
- import
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- inter-as-vpn boolean
- keepalive number
- label-allocation
- label-ipv6
- explicit-null boolean
- label-preference number
- link-state-route-export boolean
- link-state-route-import boolean
- local-as
- as-number number
- prepend-global-as boolean
- private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- mp-bgp-keep boolean
- multihop number
- multipath
- ebgp number
- family keyword
- apply-groups reference
- apply-groups-exclude reference
- ebgp number
- ibgp number
- max-paths number
- restrict keyword
- unequal-cost boolean
- ibgp number
- max-paths number
- restrict keyword
- unequal-cost boolean
- neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
- add-paths
- evpn
- receive boolean
- send (number | keyword)
- ipv4
- receive boolean
- send (number | keyword)
- ipv6
- receive boolean
- send (number | keyword)
- label-ipv4
- receive boolean
- send (number | keyword)
- label-ipv6
- receive boolean

```


configure router bgp neighbor add-paths label-ipv6 send

```

- send (number | keyword)
- vpn-ipv4
- receive boolean
- send (number | keyword)
- vpn-ipv6
- receive boolean
- send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
- evpn boolean
- ipv4 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- advertise-ldp-prefix boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key encrypted-leaf
- authentication-keychain reference
- bfd
- multiplier number
- receive-interval number
- transmit-interval number
- type keyword
- bfd-liveness boolean
- bfd-strict-mode
- advertise
- holdtime number
- next-hop-reachability boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
- allow-local-fallback boolean
- cluster-id ipv4-address
- orr-location number
- connect-retry number
- damp-peer-oscillations
- error-interval number
- idle-hold-time
- initial-wait number
- max-wait number
- second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
- ebgp number
- ibgp number
- default-preference
- ebgp number
- ibgp number
- default-route-target boolean
- description description
- ebgp-default-reject-policy
- export boolean
- import boolean
- egress-engineering
- admin-state keyword

```

configure router bgp neighbor egress-engineering apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **egress-peer-engineering-label-unicast** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **vpn-ipv4** *boolean*
- **family**
 - **bgp-ls** *boolean*
 - **evpn** *boolean*
 - **flow-ipv6** *boolean*
 - **flow-vpn-ipv4** *boolean*
 - **flow-vpn-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **ms-pw** *boolean*
 - **route-target** *boolean*
 - **sr-policy-ipv4** *boolean*
 - **sr-policy-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **group** *reference*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **l2vpn-cisco-interop** *boolean*

configure router bgp neighbor label-preference

```

- label-preference number
- link-bandwidth
- accept-from-ebgp
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- add-to-received-ebgp
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- aggregate-used-paths
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- send-to-ebgp
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- next-hop-unchanged
  - evpn boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
- outbound-route-filtering
  - extended-community
    - accept-orf boolean
    - send-orf
      - route-target named-item
- passive boolean
- path-mtu-discovery boolean
- peer-as number
- peer-creation-type keyword
- peer-ip-tracking boolean

```

configure router bgp neighbor preference

- **preference** *number*
- **prefix-limit** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-excess** *number*
 - **idle-timeout** *number*
 - **log-only** *boolean*
 - **maximum** *number*
 - **post-import** *boolean*
 - **threshold** *number*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **neighbor-trust**
 - **evpn** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **next-hop-resolution**
 - **allow-unresolved-leaking** *boolean*
- **labeled-routes**
 - **allow-static** *boolean*
 - **rr-use-route-table** *boolean*
 - **transport-tunnel**
 - **family** *keyword*
 - **allow-flex-algo-fallback** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **enforce-untagged-route** *keyword*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
 - **udp** *boolean*
- **use-bgp-routes**
 - **label-ipv6-explicit-null** *boolean*
- **policy** *reference*
- **shortcut-tunnel**
 - **family** *keyword*
 - **allow-flex-algo-fallback** *boolean*
 - **apply-groups** *reference*

configure router bgp next-hop-resolution shortcut-tunnel family apply-groups-exclude

- **apply-groups-exclude** *reference*
- **disallow-igp** *boolean*
- **enforce-strict-tunnel-tagging** *boolean*
- **enforce-untagged-route** *keyword*
- **resolution** *keyword*
- **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
- **use-bgp-routes** *boolean*
- **use-leaked-routes**
 - **static** *boolean*
- **vpn-family-policy** *reference*
- **weighted-ecmp** *boolean*
- **optimal-route-reflection**
 - **location** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **primary-ip-address** *ipv4-unicast-address*
 - **primary-ipv6-address** *ipv6-unicast-address*
 - **secondary-ip-address** *ipv4-unicast-address*
 - **secondary-ipv6-address** *ipv6-unicast-address*
 - **tertiary-ip-address** *ipv4-unicast-address*
 - **tertiary-ipv6-address** *ipv6-unicast-address*
- **spf-wait**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **outbound-route-filtering**
 - **extended-community**
 - **accept-orf** *boolean*
 - **send-orf**
 - **route-target** *named-item*
- **override-tunnel-elc** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **purge-timer** *number*
- **rapid-update**
 - **evpn** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **rapid-withdrawal** *boolean*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **rib-management**
 - **ipv4**
 - **leak-import**

configure router bgp rib-management ipv4 leak-import apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **policy** (*policy-expr-string* | *string*)
- **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **label-ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **label-ipv6**
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **route-table-install** *boolean*
- **route-target-list** *named-item*
- **router-id** *ipv4-address*
- **rr-vpn-forwarding** *boolean*
- **segment-routing**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
- **selective-label-ip** *keyword*
- **selective-label-ip-prioritization** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **sr-policy-import** *boolean*
- **subconfed-vpn-forwarding** *boolean*
- **tcp-mss** *number*
- **third-party-nexthop** *boolean*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **confederation**
 - **confed-as-num** *number*
 - **members** *number*
- **description** *description*

configure router dhcp-server

```

- dhcp-server
- apply-groups reference
- apply-groups-exclude reference
- dhcpv4 named-item
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description description
- failover
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ignore-mclt-on-takeover boolean
- maximum-client-lead-time number
- partner-down-delay number
- peer reference
- apply-groups reference
- apply-groups-exclude reference
- sync-tag named-item
- startup-wait-time number
- force-renews boolean
- lease-hold
- additional-scenarios
- fwa-address-assignment boolean
- internal-lease-ipsec boolean
- solicited-release boolean
- time number
- pool named-item
- apply-groups reference
- apply-groups-exclude reference
- description description
- failover
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ignore-mclt-on-takeover boolean
- maximum-client-lead-time number
- partner-down-delay number
- peer reference
- apply-groups reference
- apply-groups-exclude reference
- sync-tag named-item
- startup-wait-time number
- max-lease-time number
- min-lease-time number
- minimum-free
- absolute number
- event-when-depleted boolean
- percent number
- nak-non-matching-subnet boolean
- offer-time number
- options
- option (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- ascii-string string-not-all-spaces
- duration number
- empty
- hex-string hex-string
- ipv4-address ipv4-address
- netbios-node-type keyword
- subnet ipv4-unicast-prefix
- address-range ipv4-unicast-address end ipv4-unicast-address
- apply-groups reference

```

configure router dhcp-server dhcpv4 pool subnet address-range apply-groups-exclude

```

    - apply-groups-exclude reference
    - failover-control-type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
    - exclude-addresses ipv4-unicast-address end ipv4-unicast-address
    - maximum-declined number
    - minimum-free
      - absolute number
      - event-when-depleted boolean
      - percent number
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string-not-all-spaces
        - duration number
        - empty
        - hex-string hex-string
        - ipv4-address ipv4-address
        - netbios-node-type keyword
    - pool-selection
      - use-gi-address
        - scope keyword
      - use-pool-from-client
        - delimiter string-not-all-spaces
    - user-db reference
    - user-identification keyword
  - dhcpv6 named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-provisioned boolean
    - defaults
      - apply-groups reference
      - apply-groups-exclude reference
      - options
        - option (number | keyword)
          - apply-groups reference
          - apply-groups-exclude reference
          - ascii-string string-not-all-spaces
          - domain-string string
          - duration number
          - empty
          - hex-string hex-string
          - ipv6-address ipv6-address
      - preferred-lifetime number
      - rebind-time number
      - renew-time number
      - valid-lifetime number
    - description description
    - failover
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ignore-mclt-on-takeover boolean
      - maximum-client-lead-time number
      - partner-down-delay number
      - peer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - sync-tag named-item
      - startup-wait-time number
    - ignore-rapid-commit boolean

```


configure router dhcp-server dhcpv6 interface-id-mapping

- **interface-id-mapping** *boolean*
- **lease-hold**
 - **additional-scenarios**
 - **fwa-address-assignment** *boolean*
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
- **lease-query** *boolean*
- **pool** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delegated-prefix**
 - **length** *number*
 - **maximum** *number*
 - **minimum** *number*
 - **description** *description*
 - **exclude-prefix** *ipv6-prefix*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *named-item*
 - **startup-wait-time** *number*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string-not-all-spaces*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *hex-string*
 - **ipv6-address** *ipv6-address*
- **prefix** *ipv6-prefix*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **failover-control-type** *keyword*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string-not-all-spaces*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *hex-string*
 - **ipv6-address** *ipv6-address*
 - **preferred-lifetime** *number*
 - **prefix-length-threshold** *number*
 - **absolute** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **event-when-depleted** *boolean*
 - **percent** *number*
 - **prefix-type**
 - **pd** *boolean*
 - **wan-host** *boolean*

configure router dhcp-server dhcpv6 pool prefix rebind-time

```

    - rebind-time number
    - renew-time number
    - valid-lifetime number
  - prefix-length-threshold number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - minimum-free-percent number
  - pool-selection
    - use-link-address
      - scope keyword
    - use-pool-from-client
      - delimiter string-not-all-spaces
  - server-id
    - apply-groups reference
    - apply-groups-exclude reference
    - duid-enterprise
      - ascii-string string-not-all-spaces
      - hex-string hex-string
    - duid-link-local
  - user-db reference
  - user-identification keyword
- dns
  - redirect-vprn
    - service reference
    - apply-groups reference
    - apply-groups-exclude reference
    - preference number
- ecmp number
- entropy-label boolean
- evpn-neighbor-synchronization
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - evi-route-target evi-route-target
  - retention-timer number
  - route-distinguisher vpn-route-distinguisher
  - route-tag number
- fib-priority keyword
- icmp-tunneling boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group-if-query-source-address ipv4-unicast-address
  - interface interface-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - redundant-mcast boolean
    - router-alert-check boolean
    - ssm-translate
      - group-range start ipv4-multicast-address end ipv4-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv4-unicast-address
  - static

```

configure router igmp interface static group

```

    - group ipv4-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv4-unicast-address
      - starg
    - group-range start ipv4-multicast-address end ipv4-multicast-
address step ipv4-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv4-unicast-address
      - starg
    - subnet-check boolean
    - version keyword
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - ssm-translate
    - group-range start ipv4-multicast-address end ipv4-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv4-unicast-address
  - interface interface-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - autoconfigure
      - ipv4
        - dhcp-client
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - class-id
            - ascii-string string
            - hex-string hex-string
          - client-id
            - ascii-string string
            - hex-string hex-string
          - interface
          - mac
          - lease-time (number | keyword)
          - request-options
            - dns-server boolean
            - router boolean
            - static-route boolean
        - description very-long-description
        - dist-cpu-protection reference
        - egress
          - filter
            - ip reference
            - ipv6 reference
      - eth-cfm
        - mep md-admin-name reference ma-admin-name reference mep-id number
        - admin-state keyword
        - alarm-notification
          - fng-alarm-time number
          - fng-reset-time number
        - apply-groups reference
        - apply-groups-exclude reference
        - ccm boolean
        - ccm-ltm-priority number
        - ccm-tlv-ignore keyword
        - description description
        - eth-test

```

configure router interface eth-cfm mep eth-test bit-error-threshold

```

    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
    - facility-fault boolean
    - low-priority-defect keyword
    - mac-address mac-unicast-address-no-zero
    - one-way-delay-threshold number
  - flavor keyword
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
    - ipv6
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
  - if-attribute
    - admin-group reference
    - delay
      - dynamic
      - static number
    - srlg-group reference
  - ingress
    - filter
      - ip reference
      - ipv6 reference
  - ip-mtu number
  - ipsec
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ip-exception reference
    - ipsec-tunnel named-item
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - bfd
      - bfd-designate boolean
      - bfd-liveness
        - dest-ip ipv4-unicast-address
        - interface interface-name
        - service-name service-name
    - clear-df-bit boolean
    - copy-traffic-class-upon-decapsulation boolean
    - description description
    - encapsulated-ip-mtu number
    - icmp-generation
      - frag-required
        - admin-state keyword
        - interval number
        - message-count number
    - icmp6-generation
      - packet-too-big
        - admin-state keyword
        - interval number
        - message-count number
    - ip-mtu number
    - key-exchange

```

configure router interface ipsec ipsec-tunnel key-exchange dynamic

- **dynamic**
 - **auto-establish** *boolean*
 - **auto-establish-sustain** *boolean*
 - **cert**
 - **cert-profile** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **primary** *keyword*
 - **secondary** *keyword*
 - **trust-anchor-profile** *reference*
 - **id**
 - **fqdn** *fully-qualified-domain-name*
 - **ipv4** *ipv4-unicast-address*
 - **ipv6** *(ipv4-address-no-zone | ipv6-address-no-zone)*
 - **ike-policy** *reference*
 - **ipsec-transform** *reference*
 - **ppk**
 - **id** *reference*
 - **list** *reference*
 - **pre-shared-key** *encrypted-leaf*
 - **reverse-route-injection**
 - **metric** *number*
 - **preference** *number*
- **manual**
 - **keys** *number direction keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *hex-string*
 - **encryption-key** *hex-string*
 - **ipsec-transform** *reference*
 - **spi** *number*
- **local-gateway-address-override** *(ipv4-address-no-zone | ipv6-address-no-zone)*
- **max-history-key-records**
 - **esp** *number*
 - **ike** *number*
- **pmtu-discovery-aging** *number*
- **private-sap** *number*
- **private-service** *service-name*
- **private-tcp-mss-adjust** *number*
- **propagate-pmtu-v4** *boolean*
- **propagate-pmtu-v6** *boolean*
- **public-tcp-mss-adjust** *(number | keyword)*
- **remote-gateway-address** *(ipv4-address-no-zone | ipv6-address-no-zone)*
- **replay-window** *number*
- **security-policy**
 - **id** *number*
 - **strict-match** *boolean*
- **ipv6-exception** *reference*
- **public-sap** *number*
- **tunnel-group** *reference*
- **ipv4**
 - **allow-directed-broadcasts** *boolean*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*

configure router interface ipv4 dhcp gi-address

```

- gi-address ipv4-unicast-address
- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - if-name
    - ifindex
    - none
    - port-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string-not-all-spaces
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - port-id boolean
    - service-id boolean
    - string string-not-all-spaces
    - system-id boolean
- relay-plain-bootp boolean
- server ipv4-unicast-address
- src-ip-addr keyword
- trusted boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachable
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address ipv4-unicast-address
- local-dhcp-server reference
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - cpm-nat-policy reference
  - cpm-spf-nat-policy reference
- neighbor-discovery
  - learn-unsolicited boolean
  - limit
    - log-only boolean
    - max-entries number
    - threshold number
  - local-proxy-arp boolean
  - proactive-refresh boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean
  - retry-timer number
  - static-neighbor ipv4-address
    - apply-groups reference
    - apply-groups-exclude reference

```

configure router interface ipv4 neighbor-discovery static-neighbor mac-address

```

- mac-address mac-address
- static-neighbor-unnumbered
- mac-address mac-address
- timeout number
- primary
- address ipv4-unicast-address
- apply-groups reference
- apply-groups-exclude reference
- broadcast keyword
- gre-termination boolean
- prefix-length number
- tag (number | keyword)
- secondary ipv4-unicast-address
- apply-groups reference
- apply-groups-exclude reference
- broadcast keyword
- igp-inhibit boolean
- prefix-length number
- tag (number | keyword)
- tcp-mss number
- unnumbered
- ip-address ipv4-unicast-address
- ip-int-name interface-name
- system
- urpf-check
- ignore-default boolean
- mode keyword
- vrrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key encrypted-leaf
- backup ipv4-unicast-address
- bfd-liveness
- apply-groups reference
- apply-groups-exclude reference
- dest-ip ipv4-address
- interface-name interface-name
- service-name service-name
- init-delay number
- mac mac-unicast-address
- master-int-inherit boolean
- message-interval number
- monitor-oper-group reference
- ntp-reply boolean
- oper-group reference
- owner boolean
- passive boolean
- ping-reply boolean
- policy reference
- preempt boolean
- priority number
- ssh-reply boolean
- standby-forwarding boolean
- telnet-reply boolean
- traceroute-reply boolean
- ipv6
- address ipv6-address
- apply-groups reference
- apply-groups-exclude reference
- duplicate-address-detection boolean
- eui-64 boolean
- prefix-length number
- primary-preference number

```

configure router interface ipv6 address tag

- **tag** (*number* | *keyword*)
- **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **link-local-address**
 - **address** *ipv6-address*
 - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-nd** *boolean*
 - **proactive-refresh** *keyword*
 - **proxy-nd-policy** *reference*
 - **reachable-time** *number*
 - **stale-time** *number*
 - **static-neighbor** *ipv6-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *mac-address*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *ipv6-address*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *interface-name*

configure router interface ipv6 vrrp bfd-liveness service-name

```

    - service-name service-name
    - init-delay number
    - mac mac-unicast-address
    - master-int-inherit boolean
    - message-interval number
    - monitor-oper-group reference
    - ntp-reply boolean
    - oper-group reference
    - owner boolean
    - passive boolean
    - ping-reply boolean
    - policy reference
    - preempt boolean
    - priority number
    - standby-forwarding boolean
    - telnet-reply boolean
    - traceroute-reply boolean
- lag
- ldp-sync-timer
  - end-of-lib boolean
  - seconds number
- load-balancing
  - ip-load-balancing keyword
  - lsr-load-balancing keyword
- loopback
- mac mac-unicast-address
- mac-accounting boolean
- network-domains
  - network-domain reference
- port (port-and-encap | keyword)
- ptp-hw-assist
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- qos
  - apply-groups reference
  - apply-groups-exclude reference
  - egress-instance number
  - egress-port-redirect-group reference
  - ingress-fp-redirect-group reference
  - ingress-instance number
  - network-policy reference
- tos-marking-state keyword
- untrusted
  - default-forwarding keyword
- urpf-selected-vprns boolean
- vas-if-type keyword
- ipsec
  - multi-chassis-shunt-interface interface-name
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - multi-chassis-shunting-profile named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - multi-chassis-shunt-interface reference
  - security-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number

```

configure router ipsec security-policy entry apply-groups

- **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ip**
 - **address** *ipv4-prefix*
 - **any** *boolean*
 - **local-ipv6**
 - **address** *ipv6-prefix*
 - **any** *boolean*
 - **remote-ip**
 - **address** *ipv4-prefix*
 - **any** *boolean*
 - **remote-ipv6**
 - **address** *ipv6-prefix*
 - **any** *boolean*
- **ipv6**
 - **neighbor-discovery**
 - **reachable-time** *number*
 - **stale-time** *number*
 - **router-advertisement**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rdnss-lifetime** (*keyword* | *number*)
 - **server** *ipv6-address*
 - **interface** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **current-hop-limit** *number*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **server** *ipv6-address*
 - **managed-configuration** *boolean*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **mtu** *number*
 - **nd-router-preference** *keyword*
 - **other-stateful-configuration** *boolean*
 - **prefix** *ipv6-prefix*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*keyword* | *number*)
 - **valid-lifetime** (*keyword* | *number*)
 - **reachable-time** *number*
 - **retransmit-time** *number*
 - **router-lifetime** *number*
 - **use-virtual-mac** *boolean*
 - **ipv6-te-router-id**
 - **interface** *reference*
 - **isis** *number*
 - **additional-system-id** *system-id-no-default*
 - **admin-state** *keyword*
 - **advertise-passive-only** *boolean*
 - **advertise-router-capability** *keyword*
 - **advertise-tunnel-link** *boolean*
 - **all-l1isis** *mac-address*
 - **all-l2isis** *mac-address*

configure router isis apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **area-address** *area-address*
- **authentication-check** *boolean*
- **authentication-key** *encrypted-leaf*
- **authentication-keychain** *reference*
- **authentication-type** *keyword*
- **csnp-authentication** *boolean*
- **csnp-on-p2p** *boolean*
- **database-export**
 - **bgp-ls-identifier**
 - **value** *number*
 - **igp-identifier** *number*
 - **reachable-ls-only** *boolean*
- **default-route-tag** *number*
- **entropy-label**
 - **override-tunnel-elc** *boolean*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **fast-flooding**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **lsp-receiver**
 - **advertise-flooding-tlv** *boolean*
 - **burst-size** *number*
 - **lsp-per-psnp** *number*
 - **lsp-transmit-interval** *number*
 - **psnp-interval** *number*
 - **receive-window** *number*
 - **lsp-sender**
 - **enforce-burst-size** *boolean*
 - **enforce-receive-window** *boolean*
 - **local-defaults**
 - **burst-size** *number*
 - **lsp-per-psnp** *number*
 - **lsp-transmit-interval** *number*
 - **receive-window** *number*
- **flexible-algorithms**
 - **admin-state** *keyword*
 - **advertise-admin-group** *keyword*
 - **flex-algo** *number*
 - **advertise** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **loopfree-alternate**
 - **micro-loop-avoidance**
 - **participate** *boolean*
- **graceful-restart**
 - **helper-mode** *boolean*
- **hello-authentication** *boolean*
- **hello-padding** *keyword*
- **ignore-attached-bit** *boolean*
- **ignore-lsp-errors** *boolean*
- **ignore-narrow-metric** *boolean*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **allow-sr-over-srte** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*

configure router isis igp-shortcut tunnel-next-hop family apply-groups-exclude

```

    - apply-groups-exclude reference
    - resolution keyword
    - resolution-filter
      - rsvp boolean
      - sr-te boolean
- iid-tlv boolean
- import-policy reference
- interface interface-name
  - adjacency-set reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - ipv4
      - include-bfd-tlv boolean
    - ipv6
      - include-bfd-tlv boolean
  - conditional-advertise-prefix reference
  - csnp-interval number
  - default-instance boolean
  - delay-normalization
    - delay-tolerance-interval number
    - minimum-delay number
  - fast-flooding
    - apply-groups reference
    - apply-groups-exclude reference
    - lsp-receiver
      - admin-state keyword
      - advertise-flooding-tlv boolean
      - burst-size number
      - lsp-per-psnp number
      - lsp-transmit-interval number
      - psnp-interval number
      - receive-window number
    - lsp-sender
      - admin-state keyword
      - enforce-burst-size boolean
      - enforce-receive-window boolean
      - local-defaults
        - burst-size number
        - lsp-per-psnp number
        - lsp-transmit-interval number
        - receive-window number
  - flex-algo number
    - apply-groups reference
    - apply-groups-exclude reference
  - ipv4-node-sid
    - index number
    - label number
  - ipv6-node-sid
    - index number
    - label number
  - hello-authentication boolean
  - hello-authentication-key encrypted-leaf
  - hello-authentication-keychain reference
  - hello-authentication-type keyword
  - hello-padding keyword
  - interface-type keyword
  - ipv4-adjacency-sid
    - label number
  - ipv4-multicast boolean
  - ipv4-node-sid
    - clear-n-flag boolean
    - index number

```

configure router isis interface ipv4-node-sid label

```

- label number
- ipv6-adjacency-sid
- label number
- ipv6-multicast boolean
- ipv6-node-sid
- clear-n-flag boolean
- index number
- label number
- ipv6-unicast boolean
- level keyword
- apply-groups reference
- apply-groups-exclude reference
- hello-authentication-key encrypted-leaf
- hello-authentication-keychain reference
- hello-authentication-type keyword
- hello-interval number
- hello-multiplier number
- hello-padding keyword
- ipv4-multicast-metric number
- ipv6-multicast-metric number
- ipv6-unicast-metric number
- metric number
- passive boolean
- priority number
- sd-offset number
- sf-offset number
- level-capability keyword
- load-balancing-weight number
- loopfree-alternate
- exclude boolean
- policy-map
- route-nh-template reference
- lsp-pacing-interval number
- mesh-group
- blocked
- value number
- passive boolean
- retransmit-interval number
- sid-protection boolean
- tag number
- ipv4-multicast-routing keyword
- ipv4-routing boolean
- ipv6-multicast-routing keyword
- ipv6-routing keyword
- ldp-over-rsvp boolean
- ldp-sync boolean
- level keyword
- advertise-router-capability boolean
- apply-groups reference
- apply-groups-exclude reference
- authentication-key encrypted-leaf
- authentication-keychain reference
- authentication-type keyword
- csnp-authentication boolean
- database-export-exclude boolean
- default-ipv4-multicast-metric number
- default-ipv6-multicast-metric number
- default-ipv6-unicast-metric number
- default-metric number
- external-preference number
- hello-authentication boolean
- hello-padding keyword
- loopfree-alternate-exclude boolean
- lsp-mtu-size number

```

configure router isis level preference

- **preference** *number*
- **psnp-authentication** *boolean*
- **wide-metrics-only** *boolean*
- **level-capability** *keyword*
- **link-group** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *very-long-description*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-multicast-metric-offset** *number*
 - **ipv4-unicast-metric-offset** *number*
 - **ipv6-multicast-metric-offset** *number*
 - **ipv6-unicast-metric-offset** *number*
 - **member** *reference*
 - **oper-members** *number*
 - **revert-members** *number*
- **loopfree-alternate**
 - **augment-route-table** *boolean*
 - **exclude**
 - **prefix-policy** *reference*
 - **multi-homed-prefix**
 - **preference** *keyword*
 - **remote-lfa**
 - **max-pq-cost** *number*
 - **node-protect**
 - **max-pq-nodes** *number*
 - **ti-lfa**
 - **max-sr-frr-labels** *number*
 - **node-protect**
- **lsp-lifetime** *number*
- **lsp-minimum-remaining-lifetime** *number*
- **lsp-mtu-size** *number*
- **lsp-refresh**
 - **half-lifetime** *boolean*
 - **interval** *number*
- **multi-part-tlv**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **neighbor** *boolean*
 - **srlg** *boolean*
- **multi-topology**
 - **ipv4-multicast** *boolean*
 - **ipv6-multicast** *boolean*
 - **ipv6-unicast** *boolean*
- **multicast-import**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **overload**
 - **max-metric** *boolean*
 - **overload-export-external** *boolean*
 - **overload-export-interlevel** *boolean*
 - **overload-fib-error-notify-only**
 - **retry** *number*
 - **overload-include-locators** *boolean*
- **overload-on-boot**
 - **max-metric** *boolean*
 - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
 - **limit** *number*
 - **log-only** *boolean*

configure router isis prefix-limit overload-timeout

- **overload-timeout** (number | keyword)
- **warning-threshold** number
- **prefix-unreachable**
 - **maximum-number-upas** number
 - **process-received-upa** boolean
 - **upa-lifetime** number
 - **upa-metric** number
- **psnp-authentication** boolean
- **reference-bandwidth** number
- **rib-priority**
 - **high**
 - **prefix-list** reference
 - **tag** number
- **router-id** router-id
- **segment-routing**
 - **adj-sid-hold** (number | keyword)
 - **adjacency-set** number
 - **advertise** boolean
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **family** keyword
 - **parallel** boolean
 - **sid**
 - **label** number
 - **adjacency-sid**
 - **allocate-dual-sids** boolean
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **entropy-label** boolean
 - **export-tunnel-table** keyword
- **mapping-server**
 - **admin-state** keyword
 - **node-sid-map** number
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **clear-n-flag** boolean
 - **ip-prefix** ipv4-unicast-prefix
 - **level-capability** keyword
 - **range** number
 - **set-flags**
 - **bit-s** boolean
- **maximum-sid-depth**
 - **override-bmi** number
 - **override-erld** number
- **micro-loop-avoidance**
 - **fib-delay** number
- **multi-topology**
 - **mt2** boolean
- **prefix-sid-range**
 - **global**
 - **max-index** number
 - **start-label** number
- **srlb** reference
- **tunnel-mtu** number
- **tunnel-table-pref** number
- **standard-multi-instance** boolean
- **strict-adjacency-check** boolean
- **summary-address** (ipv4-prefix | ipv6-prefix)
 - **advertise-unreachable**
 - **advertise-route-tag** number
 - **match-route-tag** number
 - **apply-groups** reference
 - **apply-groups-exclude** reference

configure router isis summary-address level-capability

```

- level-capability keyword
- route-tag number
- suppress-attached-bit boolean
- system-id system-id
- timers
- lsp-wait
  - lsp-initial-wait number
  - lsp-max-wait number
  - lsp-second-wait number
- spf-wait
  - spf-initial-wait number
  - spf-max-wait number
  - spf-second-wait number
- traffic-engineering boolean
- traffic-engineering-options
  - advertise-delay boolean
  - application-link-attributes
    - legacy boolean
  - ipv6 boolean
- unicast-import
  - ipv4 boolean
  - ipv6 boolean
- ldp
  - admin-state keyword
  - aggregate-prefix-match
    - admin-state keyword
    - prefix-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - consider-system-ip-in-gep boolean
  - entropy-label-capability boolean
  - export-policy reference
  - export-tunnel-table reference
  - fast-reroute
    - backup-sr-tunnel boolean
  - fec-originate (ipv4-prefix | ipv6-prefix)
  - advertised-label number
  - apply-groups reference
  - apply-groups-exclude reference
  - interface named-item-or-empty
  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - pop boolean
  - swap-label number
  - graceful-restart
    - helper-mode boolean
    - maximum-recovery-time number
    - neighbor-liveness-time number
  - implicit-null-label boolean
  - import-pmsi-routes
  - import-policy reference
  - import-tunnel-table reference
  - interface-parameters
    - interface reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness
      - ipv4 boolean
    - ipv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - fec-type-capability
        - prefix-ipv4 boolean

```


configure router ldp interface-parameters interface ipv4 hello

```

- hello
  - factor number
  - timeout number
- keepalive
  - factor number
  - timeout number
- local-lsr-id
  - interface-name reference
- transport-address keyword
- load-balancing-weight number
- ipv4
  - hello
    - factor number
    - timeout number
  - keepalive
    - factor number
    - timeout number
  - transport-address keyword
- label-withdrawal-delay number
- ldp-shortcut
  - ipv4 boolean
- legacy-ipv4-lsr-interop boolean
- lsp-bfd reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - priority number
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- max-ecmp-routes number
- prefer-protocol-stitching boolean
- prefer-tunnel-in-tunnel boolean
- session-parameters
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - adv-adj-addr-only boolean
    - adv-local-lsr-id boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - community policy-string
    - dod-label-distribution boolean
    - export-addresses reference
    - export-prefixes reference
    - fec-limit
      - limit number
      - log-only boolean
      - threshold number
    - fec-type-capability
      - prefix-ipv4 boolean
    - fec129-cisco-interop boolean
    - import-prefixes reference
    - pe-id-mac-flush-interop boolean
- shortcut-local-ttl-propagate boolean
- shortcut-transit-ttl-propagate boolean
- targeted-session
  - auto-rx
    - ipv4
      - admin-state keyword
      - tunneling boolean
  - auto-tx
    - ipv4
      - admin-state keyword
      - tunneling boolean

```

configure router ldp targeted-session export-prefixes

- **export-prefixes** *reference*
- **import-prefixes** *reference*
- **ipv4**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
- **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **format-32bit** *boolean*
 - **interface-name** *reference*
 - **tunneling**
 - **lsp** *named-item-64*
- **peer-template** *named-item*
 - **admin-state** *keyword*
 - **adv-local-lsr-id** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **community** *policy-string*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **interface-name** *reference*
 - **tunneling** *boolean*
- **peer-template-map** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-map** *reference*
- **resolve-v6-prefix-over-shortcut** *boolean*
- **sdp-auto-targeted-session** *boolean*
- **tcp-session-parameters**
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
- **peer-transport** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*

configure router ldp tcp-session-parameters peer-transport path-mtu-discovery

```

    - path-mtu-discovery boolean
    - ttl-security number
  - tunnel-down-damp-time number
  - tunnel-table-pref number
  - weighted-ecmp boolean
- leak-export
  - leak-export-limit number
  - policy-name (policy-expr-string | string)
- lsp-bfd
  - bfd-sessions number
  - tail-end
    - apply-groups reference
    - apply-groups-exclude reference
    - multiplier number
    - receive-interval number
    - transmit-interval number
- mc-maximum-routes
  - log-only boolean
  - threshold number
  - value number
- mld
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group-if-query-source-address ipv6-unicast-or-linklocal-address
  - interface interface-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - router-alert-check boolean
    - ssm-translate
      - group-range start ipv6-multicast-address end ipv6-multicast-address
        - apply-groups reference
        - apply-groups-exclude reference
        - source ipv6-unicast-address
      - static
        - group ipv6-multicast-address
          - apply-groups reference
          - apply-groups-exclude reference
          - source ipv6-unicast-address
          - starg
        - group-range start ipv6-multicast-address end ipv6-multicast-
address step ipv6-address
          - apply-groups reference
          - apply-groups-exclude reference
          - source ipv6-unicast-address
          - starg
        - version keyword
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - robust-count number
    - ssm-translate
      - group-range start ipv6-multicast-address end ipv6-multicast-address
        - apply-groups reference
        - apply-groups-exclude reference
        - source ipv6-unicast-address

```

configure router mpls

```

- mpls
- admin-group-frr boolean
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- auto-bandwidth-multipliers
- adjust-multiplier number
- sample-multiplier number
- auto-lsp reference
- apply-groups reference
- apply-groups-exclude reference
- one-hop boolean
- policy reference
- bypass-resignal-timer number
- cspf-on-loose-hop boolean
- dynamic-bypass boolean
- entropy-label
- rsvp-te boolean
- sr-te boolean
- exponential-backoff-retry boolean
- forwarding-policies
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- forwarding-policy named-item-64
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- binding-label number
- egress-statistics
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ingress-statistics
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- metric number
- next-hop-group number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- backup-next-hop
- apply-groups reference
- apply-groups-exclude reference
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- pushed-labels number
- apply-groups reference
- apply-groups-exclude reference
- label number
- primary-next-hop
- apply-groups reference
- apply-groups-exclude reference
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- pushed-labels number
- apply-groups reference
- apply-groups-exclude reference
- label number
- resolution-type keyword
- preference number
- revert-timer number
- tunnel-table-pref number
- reserved-label-block reference
- frr-object boolean

```

configure router mpls hold-timer

```

- hold-timer number
- interface reference
  - admin-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- label-map number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pop
  - swap
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop ipv4-unicast-address
    - out-label (number | keyword)
- srlg-group reference
- te-metric number
- least-fill-min-thd number
- least-fill-reoptim-thd number
- logger-event-bundling boolean
- lsp named-item-64
  - adaptive boolean
  - admin-state keyword
  - admin-tag reference
  - adspec boolean
  - apply-groups reference
  - apply-groups-exclude reference
- bfd
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - wait-for-up-timer number
- bgp-shortcut boolean
- bgp-transport-tunnel boolean
- binding-sid number
- class-type number
- entropy-label keyword
- exclude-admin-group reference
- exclude-node (ipv4-address-no-zone | ipv6-address-no-zone)
- fallback-path-computation-method keyword
- fast-reroute
  - frr-method keyword
  - hop-limit number
  - node-protect boolean
  - propagate-admin-group boolean
- from (ipv4-address-no-zone | ipv6-address-no-zone)
- hop-limit number
- igp-shortcut
  - admin-state keyword
  - allow-sr-over-srte boolean
  - lfa-type keyword
  - relative-metric number
- include-admin-group reference
- label-stack-reduction boolean
- ldp-over-rsvp boolean
- least-fill boolean
- load-balancing-weight number
- local-sr-protection keyword
- main-ct-retry-limit number
- max-sr-labels
  - additional-frr-labels number
  - label-stack-size number

```

configure router mpls lsp metric

```

- metric number
- metric-type keyword
- override-tunnel-elc boolean
- path-computation-method keyword
- path-profile number
  - apply-groups reference
  - apply-groups-exclude reference
  - path-group number
- pce-associations
  - diversity reference
  - policy reference
- pce-control boolean
- pce-report keyword
- primary reference
  - adaptive boolean
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-class-type number
  - bandwidth number
  - bfd
    - bfd-liveness boolean
    - bfd-template reference
    - lsp-ping-interval (number | keyword)
    - wait-for-up-timer number
  - class-type number
  - delay-metric-limit number
  - exclude-admin-group
    - group reference
  - hop-limit number
  - include-admin-group
    - group reference
  - priority
    - hold-priority number
    - setup-priority number
  - record boolean
  - record-label boolean
- propagate-admin-group boolean
- retry-limit number
- retry-timer number
- revert-timer number
- rsvp-resv-style keyword
- secondary reference
  - adaptive boolean
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - bfd
    - bfd-liveness boolean
    - bfd-template reference
    - lsp-ping-interval (number | keyword)
    - wait-for-up-timer number
  - class-type number
  - delay-metric-limit number
  - exclude-admin-group
    - group reference
  - hop-limit number
  - include-admin-group
    - group reference
  - path-preference number
  - priority
    - hold-priority number
    - setup-priority number

```

configure router mpls lsp secondary record

```

- record boolean
- record-label boolean
- srlg boolean
- standby boolean
- to (ipv4-address-no-zone | ipv6-address-no-zone)
- type keyword
- use-computed-metric boolean
- vprn-auto-bind boolean
- lsp-bsid-block reference
- lsp-history
-   admin-state keyword
- lsp-init-retry-timeout number
- lsp-template named-item
-   adaptive boolean
-   admin-state keyword
-   admin-tag reference
-   adspec boolean
-   apply-groups reference
-   apply-groups-exclude reference
-   backup-class-type number
-   bandwidth number
- bfd
-   bfd-liveness boolean
-   bfd-template reference
-   failure-action keyword
-   lsp-ping-interval (number | keyword)
- bgp-shortcut boolean
- bgp-transport-tunnel boolean
- binding-sid boolean
- class-type number
- default-path reference
- delay-metric-limit number
- entropy-label keyword
- exclude-admin-group reference
- fallback-path-computation-method keyword
- family keyword
- fast-reroute
-   frr-method keyword
-   hop-limit number
-   node-protect boolean
-   propagate-admin-group boolean
- from (ipv4-address-no-zone | ipv6-address-no-zone)
- hop-limit number
- igp-shortcut
-   admin-state keyword
-   allow-sr-over-srte boolean
-   lfa-type keyword
-   relative-metric number
- include-admin-group reference
- label-stack-reduction boolean
- ldp-over-rsvp boolean
- least-fill boolean
- load-balancing-weight number
- local-sr-protection keyword
- main-ct-retry-limit number
- max-sr-labels
-   additional-frr-labels number
-   label-stack-size number
- metric number
- metric-type keyword
- override-tunnel-elc boolean
- path-computation-method keyword
- path-profile number
-   apply-groups reference

```

configure router mpls lsp-template path-profile apply-groups-exclude

```

- apply-groups-exclude reference
- path-group number
- pce-associations
- diversity reference
- policy reference
- pce-control boolean
- pce-report keyword
- priority
- hold-priority number
- setup-priority number
- propagate-admin-group boolean
- record boolean
- record-label boolean
- retry-limit number
- retry-timer number
- template-id (number | keyword)
- type keyword
- use-computed-metric boolean
- vprn-auto-bind boolean
- max-bypass-associations number
- max-bypass-plr-associations number
- mbb-prefer-current-hops boolean
- p2p-active-path-fast-retry number
- path named-item-64
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- hop number
- apply-groups reference
- apply-groups-exclude reference
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sid-label number
- type keyword
- pce-init-lsp
- apply-groups reference
- apply-groups-exclude reference
- sr-te
- admin-state keyword
- pce-report
- rsvp-te boolean
- sr-te boolean
- resignal-on-igp-event boolean
- resignal-on-igp-overload boolean
- resignal-timer number
- retry-on-igp-overload boolean
- secondary-fast-retry-timer number
- shortcut-local-ttl-propagate boolean
- shortcut-transit-ttl-propagate boolean
- sr-te-resignal
- resignal-on-igp-event boolean
- resignal-on-igp-overload boolean
- resignal-timer number
- srlg-database
- router-id ipv4-address
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- interface ipv4-address srlg-group reference
- srlg-frr keyword
- static-lsp named-item-64
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- metric number

```


configure router mpls static-lsp push

```

- push
  - apply-groups reference
  - apply-groups-exclude reference
  - next-hop ipv4-unicast-address
  - out-label (number | keyword)
  - to ipv4-unicast-address
- static-lsp-fast-retry number
- strict-ero-nhop-direct-resolution boolean
- tunnel-table-pref
  - rsvp-te number
  - sr-te number
- user-srlg-db boolean
- mpls-labels
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-labels-hold-timer number
  - reserved-label-block named-item-64
    - apply-groups reference
    - apply-groups-exclude reference
    - end-label number
    - start-label number
  - sr-labels
    - end number
    - start number
  - static-label-range number
- mss-adjust
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-group number
  - segment-size number
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - inside
    - large-scale
      - nat-policy reference
    - nat44
      - destination-prefix ipv4-unicast-prefix
        - apply-groups reference
        - apply-groups-exclude reference
        - nat-policy reference
      - deterministic
        - address-map ipv4-address to ipv4-address nat-policy reference
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - outside-range ipv4-address
        - prefix-map ipv4-unicast-prefix nat-policy reference
          - admin-state keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - map ipv4-address to ipv4-address
            - apply-groups reference
            - apply-groups-exclude reference
            - first-outside-address ipv4-address
          - max-subscriber-limit number
  - outside
    - filters
      - downstream
        - ipv4 reference
      - upstream
        - ipv4 reference
    - mtu number
    - pool named-item

```

configure router nat outside pool address-range

```

- address-range ipv4-unicast-address end ipv4-unicast-address
- apply-groups reference
- apply-groups-exclude reference
- description description
- drain boolean
- admin-state keyword
- applications
- agnostic boolean
- use-interface-ip boolean
- apply-groups reference
- apply-groups-exclude reference
- description description
- icmp-echo-reply boolean
- large-scale
- subscriber-limit number
- use-interface-ip
- cpm-reserved-ports number
- use-well-known-ports boolean
- mode keyword
- nat-group reference
- port-forwarding
- dynamic-block-reservation boolean
- range-end number
- port-reservation
- port-blocks number
- ports number
- type keyword
- watermarks
- high number
- low number
- network-domains
- network-domain named-item
- apply-groups reference
- apply-groups-exclude reference
- description description
- origin-validation
- apply-groups reference
- apply-groups-exclude reference
- rpki-session (ipv4-address-no-zone | ipv6-address-no-zone)
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- connect-retry number
- description description
- local-address (ipv4-address-no-zone | ipv6-address-no-zone)
- port number
- refresh-time
- hold-time number
- value number
- stale-time number
- tls-transport-security
- server-san-dns-auth named-item-255
- tls-client-profile reference
- static-entry (ipv4-prefix | ipv6-prefix) upto number origin-as number
- apply-groups reference
- apply-groups-exclude reference
- valid boolean
- ospf number
- admin-state keyword
- advertise-router-capability keyword
- advertise-tunnel-link boolean
- apply-groups reference
- apply-groups-exclude reference
- area ipv4-address

```

configure router ospf area advertise-router-capability

- **advertise-router-capability** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **area-range** *ipv4-unicast-prefix*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **blackhole-aggregate** *boolean*
- **database-export-exclude** *boolean*
- **export-policy** *reference*
- **import-policy** *reference*
- **interface** *interface-name*
 - **adjacency-set** *reference*
 - **adjacency-sid**
 - **label** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **advertise-subnet** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **strict** *boolean*
 - **strict-mode-holddown** *number*
 - **conditional-advertise-prefix** *reference*
 - **dead-interval** *number*
 - **delay-normalization**
 - **delay-tolerance-interval** *number*
 - **minimum-delay** *number*
 - **flex-algo** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **node-sid**
 - **index** *number*
 - **label** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *encrypted-leaf*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** *ipv4-unicast-address*
 - **node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*
 - **rib-priority** *keyword*
 - **sid-protection** *boolean*
 - **transit-delay** *number*

configure router ospf area loopfree-alternate-exclude

- **loopfree-alternate-exclude** *boolean*
- **nssa**
 - **area-range** *ipv4-unicast-prefix*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*
 - **type-nssa** *boolean*
 - **redistribute-external** *boolean*
 - **summaries** *boolean*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *ipv4-address* **transit-area** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *encrypted-leaf*
 - **retransmit-interval** *number*
 - **transit-delay** *number*
- **asbr**
 - **trace-path** (*number* | *keyword*)
- **compatible-rfc1583** *boolean*
- **database-export**
 - **bgp-ls-identifier**
 - **value** *number*
 - **igp-identifier** *number*
 - **reachable-ls-only** *boolean*
- **entropy-label**
 - **override-tunnel-elc** *boolean*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
 - **interval** *number*
 - **limit** *number*
- **external-preference** *number*
- **flexible-algorithms**
 - **admin-state** *keyword*
 - **advertise-admin-group** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **flex-algo** *number*
 - **advertise** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **loopfree-alternate**
 - **micro-loop-avoidance**
 - **participate** *boolean*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **helper-resync-timeout** *number*
 - **protocol**
 - **lls-restart-signaling** *boolean*

configure router ospf graceful-restart protocol standard

- **standard** *boolean*
- **strict-lsa-checking** *boolean*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **allow-sr-over-srte** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **resolution** *keyword*
 - **resolution-filter**
 - **rsvp** *boolean*
 - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **loopfree-alternate**
 - **augment-route-table** *boolean*
 - **exclude**
 - **prefix-policy** *reference*
 - **multi-homed-prefix**
 - **preference** *keyword*
 - **remote-lfa**
 - **max-pq-cost** *number*
 - **node-protect**
 - **max-pq-nodes** *number*
 - **ti-lfa**
 - **max-sr-frr-labels** *number*
 - **neighbor-path-expand** *boolean*
 - **node-protect**
- **multi-instance** *boolean*
- **multicast-import** *boolean*
- **multicast-import-policy** *reference*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
- **router-id** *router-id*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **segment-routing**
 - **adj-sid-hold** (*number* | *keyword*)
 - **adjacency-set** *number*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parallel** *boolean*
 - **sid**
 - **label** *number*
 - **adjacency-sid**
 - **allocate-dual-sids** *boolean*
 - **admin-state** *keyword*

configure router ospf segment-routing apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backup-node-sid**
 - **index** *number*
 - **ip-prefix** *ipv4-unicast-prefix*
 - **label** *number*
- **entropy-label** *boolean*
- **export-tunnel-table** *keyword*
- **mapping-server**
 - **admin-state** *keyword*
 - **node-sid-map** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-prefix** *ipv4-prefix*
 - **range** *number*
 - **scope**
 - **area** *reference*
 - **as**
- **maximum-sid-depth**
 - **override-bmi** *number*
 - **override-erld** *number*
- **micro-loop-avoidance**
 - **fib-delay** *number*
- **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
- **srlb** *reference*
- **tunnel-mtu** *number*
- **tunnel-table-pref** *number*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **traffic-engineering** *boolean*
- **traffic-engineering-options**
 - **advertise-delay** *boolean*
 - **sr-te** *keyword*
- **unicast-import** *boolean*
- **ospf3** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area** *ipv4-address*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole-aggregate** *boolean*
 - **database-export-exclude** *boolean*
 - **export-policy** *reference*

configure router ospf3 area extended-lsa

- **extended-lsa** *keyword*
- **import-policy** *reference*
- **interface** *interface-name*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **inbound** *reference*
 - **outbound** *reference*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **strict** *boolean*
 - **strict-mode-holddown** *number*
 - **conditional-advertise-prefix** *reference*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*
 - **rib-priority** *keyword*
 - **sid-protection** *boolean*
 - **transit-delay** *number*
- **key-rollover-interval** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
 - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*
 - **type-nssa** *boolean*
 - **redistribute-external** *boolean*
 - **summaries** *boolean*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *ipv4-address* **transit-area** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **inbound** *reference*
 - **outbound** *reference*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **retransmit-interval** *number*
 - **transit-delay** *number*

configure router ospf3 asbr

- asbr
- database-export
 - bgp-ls-identifier
 - value *number*
 - igp-identifier *number*
 - reachable-ls-only *boolean*
- export-limit
 - log-percent *number*
 - number *number*
- export-policy *reference*
- extended-lsa *keyword*
- external-db-overflow
 - interval *number*
 - limit *number*
- external-preference *number*
- graceful-restart
 - helper-mode *boolean*
 - strict-lsa-checking *boolean*
- igp-shortcut
 - admin-state *keyword*
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - tunnel-next-hop
 - family *keyword*
 - apply-groups *reference*
 - apply-groups-exclude *reference*
 - resolution *keyword*
 - resolution-filter
 - rsvp *boolean*
 - sr-te *boolean*
- import-policy *reference*
- ldp-sync *boolean*
- loopfree-alternate
 - exclude
 - prefix-policy *reference*
 - remote-lfa
 - max-pq-cost *number*
 - node-protect
 - max-pq-nodes *number*
 - ti-lfa
 - max-sr-frr-labels *number*
 - node-protect
- multicast-import *boolean*
- overload *boolean*
- overload-include-ext-1 *boolean*
- overload-include-ext-2 *boolean*
- overload-include-stub *boolean*
- overload-on-boot
 - timeout *number*
- preference *number*
- reference-bandwidth *number*
- rib-priority
 - high
 - prefix-list *reference*
- router-id *router-id*
- rtr-adv-lsa-limit
 - log-only *boolean*
 - max-lsa-count *number*
 - overload-timeout (*number* | *keyword*)
 - warning-threshold *number*
- segment-routing
 - adj-sid-hold (*number* | *keyword*)
 - adjacency-sid
 - allocate-dual-sids *boolean*

configure router ospf3 segment-routing admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- prefix-sid-range
  - global
  - max-index number
  - start-label number
- tunnel-mtu number
- tunnel-table-pref number
- timers
  - incremental-spf-wait number
  - lsa-accumulate number
  - lsa-arrival number
  - lsa-generate
    - lsa-initial-wait number
    - lsa-second-wait number
    - max-lsa-wait number
  - redistribute-delay number
  - spf-wait
    - spf-initial-wait number
    - spf-max-wait number
    - spf-second-wait number
- unicast-import boolean
- pcep
  - apply-groups reference
  - apply-groups-exclude reference
  - pcc
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dead-timer number
    - keepalive number
    - local-address ipv4-unicast-address
    - local-address-ipv6 ipv6-unicast-address
    - max-srte-pce-init-lsps number
    - pce-associations
      - diversity named-item
        - apply-groups reference
        - apply-groups-exclude reference
        - association-id number
        - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
        - disjointness-reference boolean
        - disjointness-type keyword
        - diversity-type keyword
      - policy named-item
        - apply-groups reference
        - apply-groups-exclude reference
        - association-id number
        - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-keychain reference
      - preference number
      - route-preference keyword
      - tls-client-profile reference
      - tls-wait-timer number
    - redelegation-timer number
    - report-path-constraints boolean
    - state-timer
      - timer number
      - timer-action keyword
    - unknown-message-rate number

```

configure router pcep pce

```

- pce
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-keychain reference
  - dead-timer number
  - keepalive number
  - local-address ipv4-unicast-address
  - local-address-ipv6 ipv6-unicast-address
  - tls-server-profile reference
  - tls-wait-timer number
  - unknown-message-rate number
- pim
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-to keyword
  - import
    - join-policy reference
    - register-policy reference
  - interface interface-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assert-period number
    - bfd-liveness
      - ipv4 boolean
      - ipv6 boolean
    - bsm-check-rtr-alert boolean
    - hello-interval number
    - hello-multiplier number
    - improved-assert boolean
    - instant-prune-echo boolean
    - ipv4
      - apply-groups reference
      - apply-groups-exclude reference
      - monitor-oper-group
        - name reference
        - operation keyword
        - priority-delta number
      - multicast boolean
    - ipv6
      - apply-groups reference
      - apply-groups-exclude reference
      - monitor-oper-group
        - name reference
        - operation keyword
        - priority-delta number
      - multicast boolean
    - max-groups number
    - multicast-senders keyword
    - priority number
    - sticky-dr
      - priority number
    - three-way-hello boolean
    - tracking-support boolean
  - ipv4
    - admin-state keyword
    - rpf-table keyword
    - source-address
      - register-message ipv4-unicast-address
    - ssm-assert-compatible-mode boolean
    - ssm-default-range boolean
  - ipv6

```

configure router pim ipv6 admin-state

```

- admin-state keyword
- rpf-table keyword
- source-address
  - register-message ipv6-unicast-address
- ssm-default-range boolean
- mdt-spt boolean
- non-dr-attract-traffic boolean
- pim-ssm-scaling boolean
- rp
  - bootstrap
    - export reference
    - import reference
  - ipv4
    - anycast ipv4-unicast-address rp-set-peer ipv4-unicast-address
    - auto-rp-discovery boolean
    - bsr-candidate
      - address ipv4-unicast-address
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - candidate boolean
    - mapping-agent boolean
    - rp-candidate
      - address ipv4-unicast-address
      - admin-state keyword
      - group-range ipv4-multicast-prefix
      - holdtime number
      - priority number
    - static
      - address ipv4-unicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix ipv4-multicast-prefix
      - override boolean
  - ipv6
    - anycast ipv6-unicast-address rp-set-peer ipv6-unicast-address
    - bsr-candidate
      - address ipv6-unicast-address
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - embedded-rp
      - admin-state keyword
      - group-range ipv6-multicast-prefix
    - rp-candidate
      - address ipv6-unicast-address
      - admin-state keyword
      - group-range ipv6-multicast-prefix
      - holdtime number
      - priority number
    - static
      - address ipv6-unicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix ipv6-multicast-prefix
      - override boolean
- rpfv
  - core boolean
  - mvpn boolean
- spt-switchover (ipv4-prefix | ipv6-prefix)
  - apply-groups reference
  - apply-groups-exclude reference
  - threshold (number | keyword)
- ssm-groups

```

configure router pim ssm-groups group-range

```

    - group-range (ipv4-prefix | ipv6-prefix)
  - radius
    - apply-groups reference
    - apply-groups-exclude reference
    - server named-item
      - accept-coa boolean
      - acct-port number
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - auth-port number
      - description description
      - insert-message-authenticator boolean
      - pending-requests-limit number
      - require-message-authenticator boolean
      - secret encrypted-leaf
      - tls-client-profile reference
  - rip
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key encrypted-leaf
    - authentication-type keyword
    - bfd-liveness boolean
    - check-zero boolean
    - description description
    - export-limit
      - log-percent number
      - number number
    - export-policy reference
    - group named-item
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key encrypted-leaf
      - authentication-type keyword
      - bfd-liveness boolean
      - check-zero boolean
      - description description
      - export-policy reference
      - import-policy reference
      - message-size number
      - metric-in number
      - metric-out number
      - neighbor interface-name
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key encrypted-leaf
        - authentication-type keyword
        - bfd-liveness boolean
        - check-zero boolean
        - description description
        - export-policy reference
        - import-policy reference
        - message-size number
        - metric-in number
        - metric-out number
        - preference number
        - receive keyword
        - send keyword
        - split-horizon boolean
        - timers
          - flush number

```

configure router rip group neighbor timers timeout

```

        - timeout number
        - update number
        - unicast-address ipv4-unicast-address
    - preference number
    - receive keyword
    - send keyword
    - split-horizon boolean
    - timers
        - flush number
        - timeout number
        - update number
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - preference number
    - receive keyword
    - send keyword
    - split-horizon boolean
    - timers
        - flush number
        - timeout number
        - update number
- ripng
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean
    - description description
    - export-limit
        - log-percent number
        - number number
    - export-policy reference
    - group named-item
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - bfd-liveness boolean
        - check-zero boolean
        - description description
        - export-policy reference
        - import-policy reference
        - message-size number
        - metric-in number
        - metric-out number
    - neighbor interface-name
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - bfd-liveness boolean
        - check-zero boolean
        - description description
        - export-policy reference
        - import-policy reference
        - message-size number
        - metric-in number
        - metric-out number
        - preference number
        - receive keyword
        - send keyword
        - split-horizon boolean
        - timers
            - flush number

```

configure router ripng group neighbor timers timeout

```

    - timeout number
    - update number
  - unicast-address ipv6-unicast-address
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- router-id router-id
- rsvp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-over-bypass boolean
  - diffserv-te
    - admission-control-model keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type-bw
      - ct0 number
      - ct1 number
      - ct2 number
      - ct3 number
      - ct4 number
      - ct5 number
      - ct6 number
      - ct7 number
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - class-type number
    - te-class number
      - apply-groups reference
      - apply-groups-exclude reference
      - class-type number
      - priority number
  - entropy-label-capability boolean
  - graceful-restart
    - max-recovery number
    - max-restart number
  - graceful-shutdown boolean
  - implicit-null-label boolean
  - include-node-id-in-rro boolean
  - interface reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key encrypted-leaf
    - authentication-keychain reference

```

configure router rsvp interface bfd-liveness

- **bfd-liveness** *boolean*
- **class-type-bw**
 - **ct0** *number*
 - **ct1** *number*
 - **ct2** *number*
 - **ct3** *number*
 - **ct4** *number*
 - **ct5** *number*
 - **ct6** *number*
 - **ct7** *number*
- **graceful-restart-helper-mode** *boolean*
- **graceful-shutdown** *boolean*
- **hello-interval** *number*
- **implicit-null-label** *boolean*
- **refresh-reduction**
 - **reliable-delivery** *boolean*
- **subscription** *number*
- **te-down-threshold**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
- **te-up-threshold**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
- **keep-multiplier** *number*
- **msg-pacing**
 - **max-burst** *number*
 - **period** *number*
- **p2p-merge-point-abort-timer** *number*
- **preemption-timer** *number*
- **rapid-retransmit-time** *number*
- **rapid-retry-limit** *number*
- **refresh-reduction-over-bypass** *boolean*
- **refresh-time** *number*
- **te-down-threshold** *number*
- **te-threshold-update**
 - **on-cac-failure** *boolean*
 - **update-timer** *number*
- **te-up-threshold** *number*
- **segment-routing**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **maintenance-policy** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **hold-down-timer** *number*
 - **mode** *keyword*
 - **return-path-label** *number*
 - **revert-timer** *number*
 - **threshold** *number*
- **sr-mpls**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-sids** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **flex-algo** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-sid**

configure router segment-routing sr-mpls prefix-sids flex-algo ipv4-sid index

```

    - index number
    - label number
  - ipv6-sid
    - index number
    - label number
  - ipv4-sid
    - index number
    - label number
  - ipv6-sid
    - index number
    - label number
    - node-sid boolean
- sr-policies
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - reserved-label-block reference
  - static-policy named-item-64
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - binding-sid number
    - color number
    - distinguisher number
    - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
    - head-end (ipv4-address-no-zone | ipv6-address-no-zone | keyword)
    - maintenance-policy reference
    - preference number
    - segment-list number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - segment number
        - apply-groups reference
        - apply-groups-exclude reference
        - mpls-label number
      - weight number
- sfm-overload
  - holdoff-time number
- sgt-qos
  - dot1p
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dot1p (keyword | number)
  - dscp
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dscp (keyword | number)
    - dscp-map keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - fc keyword
- static-routes
  - apply-groups reference
  - apply-groups-exclude reference
  - hold-down
    - initial number
    - max-value number
    - multiplier number
  - route (ipv4-prefix | ipv6-prefix) route-type keyword
    - apply-groups reference
    - apply-groups-exclude reference

```


configure router static-routes route blackhole

- **blackhole**
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **community** community
 - **description** description-allow-all-white-spaces
 - **dynamic-bgp** boolean
 - **generate-icmp** boolean
 - **metric** number
 - **preference** number
 - **prefix-list**
 - **flag** keyword
 - **name** reference
 - **tag** number
- **community** community
- **dhcp-next-hop** interface-name
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **community** community
 - **description** description-allow-all-white-spaces
 - **metric** number
 - **preference** number
 - **tag** number
- **indirect** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **community** community
 - **cpe-check** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **drop-count** number
 - **interval** number
 - **log** boolean
 - **padding-size** number
 - **description** description-allow-all-white-spaces
 - **metric** number
 - **preference** number
 - **prefix-list**
 - **flag** keyword
 - **name** reference
 - **tag** number
 - **tunnel-next-hop**
 - **disallow-igp** boolean
 - **flex-algo** number
 - **resolution** keyword
 - **resolution-filter**
 - **ldp** boolean
 - **rsvp-te**
 - **lsp** named-item-64
 - **sr-isis** boolean
 - **sr-ospf** boolean
 - **sr-ospf3** boolean
 - **sr-te**
 - **lsp** named-item-64
- **interface** interface-name
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **community** community
 - **cpe-check** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **apply-groups** reference
 - **apply-groups-exclude** reference

configure router static-routes route interface cpe-check drop-count

```

    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description description-allow-all-white-spaces
  - load-balancing-weight number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
    - tag number
  - ipsec-tunnel named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - community community
    - description description-allow-all-white-spaces
    - metric number
    - preference number
    - tag number
  - leak-destination
    - router-instance reference
  - next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - community community
    - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - drop-count number
      - interval number
      - log boolean
      - padding-size number
    - description description-allow-all-white-spaces
    - ldp-sync boolean
    - load-balancing-weight number
    - metric number
    - preference number
    - prefix-list
      - flag keyword
      - name reference
    - tag number
    - validate-next-hop boolean
    - tag number
  - triggered-policy boolean
  - ttl-propagate
    - apply-groups reference
    - apply-groups-exclude reference
    - label-route-local keyword
    - label-route-transit keyword
    - lsr-label-route keyword
    - sr-mpls-local keyword
    - sr-mpls-transit keyword
    - vprn-local keyword
    - vprn-transit keyword
  - tunnel-interface
    - ldp-p2mp-leaf number sender-address ipv4-unicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
    - ldp-p2mp-root number sender-address ipv4-unicast-address

```

configure router tunnel-interface ldp-p2mp-root apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *description*
- **twamp-light**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **reflector**
 - **admin-state** *keyword*
 - **allow-ipv6-udp-checksum-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **type** *keyword*
 - **udp-port** *number*
 - **weighted-ecmp** *keyword*

4.24.1 router command descriptions

router [router-name] *named-item-64*

Synopsis	Enter the router list instance
Context	configure router <i>named-item-64</i>
Tree	router
Description	Commands in this context configure a router instance that represents a virtual router in the system. At least two instances always exist in the system. The Base or transport router and the management router are created when the system is initialized and cannot be deleted.
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-name] *named-item-64*

Synopsis	Administrative router name
Context	configure router <i>named-item-64</i>
Tree	router
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character 'router-instance' must be 1 to 32 characters
MD-CLI default	Base
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregates

Synopsis	Enter the aggregates context
Context	configure router <i>named-item-64</i> aggregates
Tree	aggregates
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

aggregate [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **aggregate** list instance

Context **configure** [router](#) *named-item-64* [aggregates](#) [aggregate](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [aggregate](#)

Description Commands in this context add aggregate routes to the routing table when there are one or more component routes. A component route is any route installed in the forwarding table that is a more-specific match of the aggregate.

The use of aggregate routes can lead to smaller routing table sizes by reducing the number of routes that need to be advertised to neighbor routes.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP address prefix of the aggregate route

Context **configure** [router](#) *named-item-64* [aggregates](#) [aggregate](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [aggregate](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

aggregator

Synopsis Enter the **aggregator** context

Context **configure** [router](#) *named-item-64* [aggregates](#) [aggregate](#) (*ipv4-prefix* | *ipv6-prefix*) [aggregator](#)

Tree [aggregate](#)

Description Commands in this context configure the BGP AGGREGATOR path attribute for the aggregate route.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Aggregator IP address
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Aggregator AS number
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-set *boolean*

Synopsis	Use AS_SET path segment type for the aggregate route
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) as-set <i>boolean</i>
Tree	as-set
Description	<p>When configured to true, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to false, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole

Synopsis	Enable the blackhole context
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole
Tree	blackhole
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole generate-icmp <i>boolean</i>
Tree	generate-icmp
Description	When configured to true , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to false , ICMP unreachable messages are not generated.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community name that is added to the aggregate route
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) community <i>community</i>
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String length	1 to 72
Max. instances	12
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) discard-component-communities <i>boolean</i>
Tree	discard-component-communities
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

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

Synopsis	Address of the indirect next hop
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: blackhole or indirect .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) local-preference <i>number</i>
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy *reference*

Synopsis	Policy name for the aggregated route
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) policy <i>reference</i>
Tree	policy
Description	<p>This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.</p> <p>If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary-only *boolean*

Synopsis	Advertise the aggregate route only
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) summary-only <i>boolean</i>

Tree	summary-only
Description	<p>When configured to true, the router suppresses the advertisement of more specific component routes for the aggregate.</p> <p>When configured to false, the router advertises both the aggregate route and its contributing routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-group *number*

Synopsis	Tunnel group from which to associate the MC IPsec state
Context	configure router <i>named-item-64</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) tunnel-group <i>number</i>
Tree	tunnel-group
Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-bgp-to-igp-export *boolean*

Synopsis	Enable the distribution of BGP routes into the IGP
Context	configure router <i>named-item-64</i> allow-bgp-to-igp-export <i>boolean</i>
Tree	allow-bgp-to-igp-export
Description	When configured to true , the router can export base BGP RTM routes into the IGP routing instance within the base router. This command applies to already exported BGP prefixes and to newly received BGP prefixes.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-icmp-redirect *boolean*

Synopsis	Allow ICMP redirects on the management interface
----------	--

Context	configure <i>router</i> <i>named-item-64</i> allow-icmp-redirect <i>boolean</i>
Tree	allow-icmp-redirect
Description	<p>When configured to true, ICMP redirect messages can be received on the management interface.</p> <p>When configured to false, all received ICMP redirect messages are dropped.</p> <p>This command cannot be configured on a non-management interface.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-icmp6-redirect *boolean*

Synopsis	Allow IPv6 ICMP redirects on the management interface
Context	configure <i>router</i> <i>named-item-64</i> allow-icmp6-redirect <i>boolean</i>
Tree	allow-icmp6-redirect
Description	<p>When configured to true, IPv6 ICMP redirect messages can be received on the management interface.</p> <p>When configured to false, all received IPv6 ICMP redirect messages are dropped.</p> <p>This command cannot be configured on a non-management interface.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

autonomous-system *number*

Synopsis	AS number advertised to peers for this router
Context	configure <i>router</i> <i>named-item-64</i> autonomous-system <i>number</i>
Tree	autonomous-system
Description	<p>This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated.</p> <p>If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp

Synopsis	Enable the bgp context
Context	configure router <i>named-item-64</i> bgp
Tree	bgp
Description	Commands in this context configure the BGP protocol instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-paths

Synopsis	Enable the add-paths context
Context	configure router <i>named-item-64</i> bgp add-paths
Tree	add-paths
Description	Commands in this context configure add-paths support for the specified address families of the BGP instance. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	configure router <i>named-item-64</i> bgp add-paths evpn
Tree	evpn
Description	Commands in this context configure the Add-Paths capability for EVPN routes. By default, Add-Paths is not enabled for EVPN routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	configure router <i>named-item-64</i> bgp add-paths evpn receive <i>boolean</i>
Tree	receive
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum number of EVPN paths to send
Context	configure router <i>named-item-64</i> bgp add-paths evpn send (<i>number</i> <i>keyword</i>)
Tree	send
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> bgp add-paths ipv4
Tree	ipv4
Description	Commands in this context configure add-paths support for the IPv4 unicast address family.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv4 prefix
Context	configure router <i>named-item-64</i> bgp add-paths ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv4 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, add-paths send capability is not enabled for unlabeled IPv4 unicast routes.</p>
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths ipv6
Tree	ipv6
Description	Commands in this context configure add-paths support for the IPv6 unicast address family.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv6 prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths ipv6 receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per unlabeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, add-paths send capability is not enabled for unlabeled IPv6 unicast routes.</p>
Range	1 to 16
Options	<p>all – Send all valid paths for each NLRI</p> <p>multipaths – Number of best multipaths for each NLRI</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths label-ipv4
Tree	label-ipv4
Description	Commands in this context configure add-paths support for the labeled IPv4 unicast address family.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Paths advertised per labeled IPv4 unicast prefix
Context	configure router <i>named-item-64</i> bgp add-paths label-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, add-paths send capability is not enabled for labeled IPv4 unicast routes.</p>
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>named-item-64</i> bgp add-paths label-ipv6
Tree	label-ipv6
Description	Commands in this context configure add-paths support for the labeled IPv6 unicast address family.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router <i>named-item-64</i> bgp add-paths label-ipv6 receive <i>boolean</i>
Tree	receive

Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Paths advertised per labeled IPv6 unicast prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4

Synopsis	Enter the vpn-ipv4 context
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths vpn-ipv4
Tree	vpn-ipv4
Description	Commands in this context configure add-paths support for the VPN-IPv4 address family.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths vpn-ipv4 receive <i>boolean</i>

Tree	receive
Description	When configured to true , this command allows multiple routes per VPN-IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths advertised per VPN-IPv4 prefix
Context	configure router <i>named-item-64</i> bgp add-paths vpn-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure router <i>named-item-64</i> bgp add-paths vpn-ipv6
Tree	vpn-ipv6
Description	Commands in this context configure add-paths support for the VPN-IPv6 address family.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
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Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths <i>vpn-ipv6</i> receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple routes per VPN-IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths advertised per VPN-IPv6 prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp add-paths <i>vpn-ipv6</i> send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the BGP instance
Context	configure <i>router</i> <i>named-item-64</i> bgp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-external

Synopsis	Enter the advertise-external context
Context	configure router <i>named-item-64</i> bgp advertise-external
Tree	advertise-external
Description	Commands in this context allow BGP to advertise its best external route to a destination for specified address families even when its best overall route is an internal route.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp advertise-external ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure router <i>named-item-64</i> bgp advertise-external ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp advertise-external label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Enable support for labeled-unicast IPv6 routes

Context **configure** [router](#) *named-item-64* [bgp](#) [advertise-external](#) **label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-inactive *boolean*

Synopsis Advertise inactive BGP routes to peers

Context **configure** [router](#) *named-item-64* [bgp](#) [advertise-inactive](#) *boolean*

Tree [advertise-inactive](#)

Description When configured to **true**, this command allows any inactive BGP route to be advertised, even though it is not the used route.

When configured to **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-ipv6-next-hops

Synopsis Enter the **advertise-ipv6-next-hops** context

Context **configure** [router](#) *named-item-64* [bgp](#) [advertise-ipv6-next-hops](#)

Tree [advertise-ipv6-next-hops](#)

Description Commands in this context allow specified BGP address family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.

This command context has no effect on routes advertised to IPv4 peers.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>advertise-ipv6-next-hops</i> <i>evpn</i> <i>boolean</i>
Tree	<i>evpn</i>
Description	<p>When configured to true, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>advertise-ipv6-next-hops</i> <i>ipv4</i> <i>boolean</i>
Tree	<i>ipv4</i>
Description	<p>When configured to true, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv4</i> <i>boolean</i>
Tree	<i>label-ipv4</i>
Description	When configured to true , label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be

received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.

When configured to **false**, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp advertise-ipv6-next-hops label-ipv6 <i>boolean</i>
Tree	label-ipv6
Description	<p>When configured to true, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	configure router <i>named-item-64</i> bgp aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Description	<p>When configured to true, the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.</p> <p>When configured to false, the AS number and router ID are added to the AGGREGATOR path attribute.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asn-4-byte *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	configure router <i>named-item-64</i> bgp asn-4-byte <i>boolean</i>

Tree	asn-4-byte
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	BGP authentication key for all peers
Context	configure router <i>named-item-64</i> bgp authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>named-item-64</i> bgp authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.</p>
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-path

Synopsis	Enter the backup-path context
Context	configure router <i>named-item-64</i> bgp backup-path
Tree	backup-path

Description	Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes. By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp backup-path ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure router <i>named-item-64</i> bgp backup-path ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp backup-path label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Enable support for labeled-unicast IPv6 routes

Context **configure** [router](#) *named-item-64* [bgp](#) [backup-path](#) **label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

best-path-selection

Synopsis Enter the **best-path-selection** context

Context **configure** [router](#) *named-item-64* [bgp](#) [best-path-selection](#)

Tree [best-path-selection](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

always-compare-med

Synopsis Enter the **always-compare-med** context

Context **configure** [router](#) *named-item-64* [bgp](#) [best-path-selection](#) [always-compare-med](#)

Tree [always-compare-med](#)

Description Commands in this context determine how the BGP decision process is affected by the MED path attribute.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

med-value *keyword*

Synopsis Action for a missing MED attribute

Context **configure** [router](#) *named-item-64* [bgp](#) [best-path-selection](#) [always-compare-med](#) [med-value](#) *keyword*

Tree [med-value](#)

Options off, missing-med-zero, missing-med-infinity, on

Default	off
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	configure router <i>named-item-64</i> bgp best-path-selection always-compare-med strict-as <i>boolean</i>
Tree	strict-as
Description	<p>When configured to true, the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS.</p> <p>When configured to false, the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path-ignore

Synopsis	Enter the as-path-ignore context
Context	configure router <i>named-item-64</i> bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp best-path-selection as-path-ignore ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	configure router named-item-64 bgp best-path-selection as-path-ignore ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l2-vpn boolean

Synopsis	Ignore AS path length for L2-VPN routes
Context	configure router named-item-64 bgp best-path-selection as-path-ignore l2-vpn boolean
Tree	l2-vpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 boolean

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	configure router named-item-64 bgp best-path-selection as-path-ignore label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 boolean

Synopsis	Ignore AS path length for labeled-unicast IPv6 routes
Context	configure router named-item-64 bgp best-path-selection as-path-ignore label-ipv6 boolean
Tree	label-ipv6
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 multicast routes
Context	configure router <i>named-item-64</i> bgp best-path-selection as-path-ignore mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 multicast routes
Context	configure router <i>named-item-64</i> bgp best-path-selection as-path-ignore mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Ignore AS path length for VPN IPv4 (SAFI 128) routes
Context	configure router <i>named-item-64</i> bgp best-path-selection as-path-ignore vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Ignore AS path length for VPN IPv6 (SAFI 128) routes
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Context	configure <i>router</i> <i>named-item-64</i> bgp best-path-selection as-path-ignore vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

compare-origin-validation-state *boolean*

Synopsis	Compare RPKI origin validation state of usable routes
Context	configure <i>router</i> <i>named-item-64</i> bgp best-path-selection compare-origin-validation-state <i>boolean</i>
Tree	compare-origin-validation-state
Description	<p>When configured to true, the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state.</p> <p>When configured to false, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

d-path-length-ignore *boolean*

Synopsis	Enable D-PATH length ignore
Context	configure <i>router</i> <i>named-item-64</i> bgp best-path-selection d-path-length-ignore <i>boolean</i>
Tree	d-path-length-ignore
Description	<p>When configured to true, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.</p> <p>At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.</p> <p>At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p>

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

deterministic-med *boolean*

Synopsis	Group paths based on AS before MED attribute comparison
Context	configure router <i>named-item-64</i> bgp best-path-selection deterministic-med <i>boolean</i>
Tree	deterministic-med
Description	<p>When configured to true, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.</p> <p>When configured to false, paths are not grouped and the overall best-path selection can depend on the order of route arrival.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-ibgp-equal

Synopsis	Enter the ebgp-ibgp-equal context
Context	configure router <i>named-item-64</i> bgp best-path-selection ebgp-ibgp-equal
Tree	ebgp-ibgp-equal
Description	<p>Commands in this context allow BGP to ignore the difference between EBGp and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGp learned route over an IBGP learned route.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn boolean

Synopsis	Consider EBGP and IBGP EVPN routes equal
Context	configure router <i>named-item-64</i> bgp best-path-selection ebgp-ibgp-equal evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	configure router <i>named-item-64</i> bgp best-path-selection ebgp-ibgp-equal ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	configure router <i>named-item-64</i> bgp best-path-selection ebgp-ibgp-equal ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 boolean

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	configure router <i>named-item-64</i> bgp best-path-selection ebgp-ibgp-equal label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Consider EBGP and IBGP label-IPv6 routes equal

Context **configure** [router](#) [named-item-64](#) [bgp](#) [best-path-selection](#) [ebgp-ibgp-equal](#) [label-ipv6](#) *boolean*

Tree [label-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis Consider EBGP and IBGP VPN-IPv4 routes equal

Context **configure** [router](#) [named-item-64](#) [bgp](#) [best-path-selection](#) [ebgp-ibgp-equal](#) [vpn-ipv4](#) *boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis Consider EBGP and IBGP VPN-IPv6 routes equal

Context **configure** [router](#) [named-item-64](#) [bgp](#) [best-path-selection](#) [ebgp-ibgp-equal](#) [vpn-ipv6](#) *boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ignore-nh-metric *boolean*

Synopsis Ignore next-hop distance in best path selection

Context **configure** [router](#) [named-item-64](#) [bgp](#) [best-path-selection](#) [ignore-nh-metric](#) *boolean*

Tree	ignore-nh-metric
Description	<p>When configured to true, BGP ignores the resolved distance to the BGP next hop in its route selection process.</p> <p>When configured to false, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the router context) or IP prefix learned from VPRN BGP peers (in the vprn context).</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-router-id

Synopsis	Enable the ignore-router-id context
Context	configure router <i>named-item-64</i> bgp best-path-selection ignore-router-id
Tree	ignore-router-id
Description	<p>Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGp paths from different EBGp peers when determining the best path for the specified address families.</p> <p>By default, BGP selects the path with the lower router ID when it compares two paths from EBGp peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-internal

Synopsis	Enter the include-internal context
Context	configure router <i>named-item-64</i> bgp best-path-selection ignore-router-id include-internal
Tree	include-internal
Description	Commands in this context specify the internal address families for which the router ID values are ignored, even when comparing two IBGP paths or an EBGp and an IBGP path.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-invalid-unusable *boolean*

Synopsis	Deem invalid routes unusable for best-path selection
Context	configure router <i>named-item-64</i> bgp best-path-selection origin-invalid-unusable <i>boolean</i>
Tree	origin-invalid-unusable
Description	<p>When configured to true, routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers.</p> <p>When configured to false, routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix according to the BGP decision process.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure router <i>named-item-64</i> bgp bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.</p> <p>When configured to false, BFD is not enabled globally for all BGP sessions.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-strict-mode

Synopsis	Enter the bfd-strict-mode context
Context	configure router <i>named-item-64</i> bgp bfd-strict-mode
Tree	bfd-strict-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>bfd-strict-mode</i> <i>advertise</i>
Tree	<i>advertise</i>
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none"> • The inherited or configured value for the bfd-liveness command that applies to the peer is true. • The interface associated with the peer has a valid BFD configuration. <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>bfd-strict-mode</i> <i>advertise</i> <i>holdtime</i> <i>number</i>
Tree	<i>holdtime</i>
Description	<p>This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.</p>
Range	1 to 65535
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>bfd-strict-mode</i> <i>next-hop-reachability</i> <i>boolean</i>

Tree	next-hop-reachability
Description	<p>When configured to true, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"> • The BFD session to the peer is in a down state. • There is a valid interface BFD configuration that applies to the peer. • There is a valid BFD liveness configuration that applies to the peer. <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is true does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to true only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"> • IPv4 • IPv6 • IPv4 VPN • IPv6 VPN • labeled unicast IPv4 • labeled unicast IPv6 • EVPN • IPv4 multicast • IPv6 multicast • IPv4 VPN multicast • IPv6 VPN multicast <p>When configured to false, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure router <i>named-item-64</i> bgp bgp-tunnel-metric

Tree	bgp-tunnel-metric
Description	Commands in this context control the tunnel table metrics associated with BGP label unicast routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-aigp *boolean*

Synopsis	Use the AIGP attribute as tunnel metric when present
Context	configure router <i>named-item-64</i> bgp bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, the TTM metric is based on the AIGP metric if the route has the path attribute. When the BGP-LU route is selected for installation in TTM and it is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the resolved cost to the BGP next-hop of the route; otherwise, the metric is set to the value in the value setting.</p> <p>When configured to false, the AIGP attribute is ignored for purposes to TTM metric derivation.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-med *boolean*

Synopsis	Use the MED attribute as tunnel metric when present
Context	configure router <i>named-item-64</i> bgp bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, the TTM metric is based on the MED metric value of the BGP-LU route. When a BGP-LU route is selected for installation in TTM and is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the resolved cost to the BGP next hop of the route added to it. Otherwise, the metric is set to the value configured using the value command.</p> <p>When configured to false, the MED attribute is ignored for TTM metric derivation.</p> <p>Note: prefer-aigp takes precedence over this command if the received BGP-LU has both attributes.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

value *number*

Synopsis	BGP tunnel metric value
Context	configure <i>router</i> <i>named-item-64</i> bgp bgp-tunnel-metric <i>value</i> <i>number</i>
Tree	<i>value</i>
Description	<p>This command configures a BGP tunnel metric for label IPv4 routes that do not have their metric set by more specific means.</p> <p>If a BGP-LU route is selected for installation in the TTM and there is no tunnel metric policy action that applies to the route, the TTM metric of the associated tunnel is set to this value if either:</p> <ul style="list-style-type: none"> • prefer-aigp is set to false • prefer-aigp is set to true but the BGP-LU route does not have an AIGP attribute
Range	0 to 4294967295
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-tunnel-preference *number*

Synopsis	BGP tunnel table preference
Context	configure <i>router</i> <i>named-item-64</i> bgp bgp-tunnel-preference <i>number</i>
Tree	<i>bgp-tunnel-preference</i>
Description	<p>This command configures the tunnel table preference for BGP-LU tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p>
Range	1 to 255
Default	12
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	configure router <i>named-item-64</i> bgp block-prefix-sid <i>boolean</i>
Tree	block-prefix-sid
Description	<p>When configured to true, all prefix SID attributes are removed from label IPv4 and label IPv6 routes when they are exchanged with EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to false, all prefix SID attributes associated with label IPv4 and label IPv6 routes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-reflect *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	configure router <i>named-item-64</i> bgp client-reflect <i>boolean</i>
Tree	client-reflect
Description	<p>When configured to true, routes received from neighbors considered to be RR clients are reflected to other peers as expected.</p> <p>When configured to false, routes received from neighbors considered to be RR clients are not reflected to other clients.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster

Synopsis	Enter the cluster context
Context	configure router <i>named-item-64</i> bgp cluster
Tree	cluster
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology location for ORR
Context	configure <i>router</i> <i>named-item-64</i> bgp cluster allow-local-fallback <i>boolean</i>
Tree	allow-local-fallback
Description	<p>When configured to true, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to true.</p> <p>When configured to false, no route is advertised to the clients when there are no reachable routes from the client's ORR location.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster-id *ipv4-address*

Synopsis	Route reflector cluster ID
Context	configure <i>router</i> <i>named-item-64</i> bgp cluster cluster-id <i>ipv4-address</i>
Tree	cluster-id
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure <i>router</i> <i>named-item-64</i> bgp cluster orr-location <i>number</i>
Tree	orr-location
Description	<p>This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.</p> <p>With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.</p>

Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure router <i>named-item-64</i> bgp connect-retry <i>number</i>
Tree	connect-retry
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

convergence

Synopsis	Enter the convergence context
Context	configure router <i>named-item-64</i> bgp convergence
Tree	convergence
Description	Commands in this context configure the route convergence delay.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> bgp convergence family <i>keyword</i>
Tree	family
Description	Commands in this context configure route convergence options for a specific BGP address family, specifically, the maximum amount of time BGP waits until it advertises the routes of the address family to its BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] keyword

Synopsis	Address family for which convergence selection applies
Context	configure router <i>named-item-64</i> bgp convergence family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait-to-advertise number

Synopsis	Maximum wait time before advertising routes
Context	configure router <i>named-item-64</i> bgp convergence family <i>keyword</i> max-wait-to-advertise <i>number</i>
Tree	max-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-wait-to-advertise number

Synopsis	Minimum wait time before advertising routes
Context	configure router <i>named-item-64</i> bgp convergence min-wait-to-advertise <i>number</i>
Tree	min-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure router <i>named-item-64</i> bgp damp-peer-oscillations

Tree	damp-peer-oscillations
Description	<p>Commands in this context support the DampPeerOscillations FSM behavior described in section 8.1 of RFC 4271, <i>A Border Gateway Protocol 4 (BGP-4)</i>.</p> <p>When unconfigured, the router does not perform peer oscillation damping and immediately transitions out of the idle state after every reset.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure router <i>named-item-64</i> bgp damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	<p>This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.</p>
Range	0 to 2048
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure router <i>named-item-64</i> bgp damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Description	<p>Commands in this context configure how long a BGP peer session remains in the idle state after some type of error causes the session to reset.</p> <p>In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur in a short time period after each session reset cause longer and longer hold times in the idle state.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
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Context	configure <i>router</i> <i>named-item-64</i> <i>bgp damp-peer-oscillations idle-hold-time initial-wait number</i>
Tree	<i>initial-wait</i>
Range	0 to 2048
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp damp-peer-oscillations idle-hold-time max-wait number</i>
Tree	<i>max-wait</i>
Range	1 to 2048
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

second-wait *number*

Synopsis	Time that doubles after each session failure
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp damp-peer-oscillations idle-hold-time second-wait number</i>
Tree	<i>second-wait</i>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp damping boolean</i>

Tree	damping
Description	<p>When configured to true, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> • Half-life: 15 minutes • Max-suppress: 60 minutes • Suppress-threshold: 3000 • Reuse-threshold: 750 <p>When configured to false, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>named-item-64</i> bgp def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.
Options	mpls, vxlan
Default	mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure router <i>named-item-64</i> bgp default-label-preference
Tree	default-label-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>named-item-64</i> bgp default-label-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>named-item-64</i> bgp default-label-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-preference

Synopsis	Enter the default-preference context
Context	configure router <i>named-item-64</i> bgp default-preference
Tree	default-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>named-item-64</i> bgp default-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Default	0

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
Context	configure router <i>named-item-64</i> bgp default-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> bgp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-neighbor-limit *number*

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	configure router <i>named-item-64</i> bgp dynamic-neighbor-limit <i>number</i>
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-default-reject-policy

Synopsis	Enter the ebgp-default-reject-policy context
Context	configure router <i>named-item-64</i> bgp ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>named-item-64</i> bgp ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>named-item-64</i> bgp ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-peer-engineering

Synopsis	Enable the egress-peer-engineering context
Context	configure router <i>named-item-64</i> bgp egress-peer-engineering
Tree	egress-peer-engineering
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure router <i>named-item-64</i> bgp egress-peer-engineering admin-state <i>keyword</i>
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure router <i>named-item-64</i> bgp enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Description	<p>When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to false, received routes are not checked for compliance with the rule.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-handling

Synopsis	Enter the error-handling context
Context	configure router <i>named-item-64</i> bgp error-handling
Tree	error-handling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

legacy-mode *boolean*

Synopsis	Enable legacy-mode of BGP error handling
Context	configure router <i>named-item-64</i> bgp error-handling legacy-mode <i>boolean</i>
Tree	legacy-mode
Description	<p>When configured to true, the BGP instance handles the BGP update error messages based on the configured update-fault-tolerance commands. If these commands are not explicitly configured, BGP error handling follows the legacy procedures described in RFC 4271, which can result in disruptive session resets.</p> <p>When configured to false, the BGP instance ignores the configured update-fault-tolerance commands and applies the new error handling procedures described in RFC 7606 on all sessions.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure router <i>named-item-64</i> bgp error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When configured to false, most errors trigger a session reset.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Enable the export context
Context	configure router <i>named-item-64</i> bgp export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to all peers. Route policies are configured in the configure policy-options context.

When no export policies are specified in this context, BGP-learned routes are advertised by default and non-BGP routes are not advertised.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis List of export policy names

Context **configure** **router** *named-item-64* **bgp** **export policy** (*policy-expr-string* | *string*)

Tree [policy](#)

Description This command specifies route policies that control the handling of outbound routes transmitted to certain peers.

Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.

Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

When no export policies are specified, BGP-learned routes are advertised by default and non-BGP routes are not advertised.

String length 1 to 255

String format 'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])

Max. instances 15

Min. instances 1

Notes This element is ordered by the user.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

extended-nh-encoding

Synopsis Enter the **extended-nh-encoding** context

Context **configure** **router** *named-item-64* **bgp** **extended-nh-encoding**

Tree [extended-nh-encoding](#)

Description Commands in this context specify the IPv4-related address families that can receive IPv6 next hops from peers. The peers should not send such routes unless the peers receive notification of this capability. If the router receives an enabled address family

route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.

Introduced25.3.R2

Platforms7705 SAR Gen 2

ipv4 *boolean*

SynopsisAdvertise encoding capability for IPv4 routes

Context**configure router** *named-item-64* **bgp extended-nh-encoding ipv4** *boolean*

Tree**ipv4**

Defaultfalse

Introduced25.3.R2

Platforms7705 SAR Gen 2

label-ipv4 *boolean*

SynopsisAdvertise encoding capability for label-IPv4 routes

Context**configure router** *named-item-64* **bgp extended-nh-encoding label-ipv4** *boolean*

Tree**label-ipv4**

Defaultfalse

Introduced25.3.R2

Platforms7705 SAR Gen 2

vpn-ipv4 *boolean*

SynopsisAdvertise encoding capability for VPN-IPv4 routes

Context**configure router** *named-item-64* **bgp extended-nh-encoding vpn-ipv4** *boolean*

Tree**vpn-ipv4**

Defaultfalse

Introduced25.3.R2

Platforms7705 SAR Gen 2

family

SynopsisEnter the **family** context

Context	configure router <i>named-item-64</i> bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure router <i>named-item-64</i> bgp family bgp-ls <i>boolean</i>
Tree	bgp-ls
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	configure router <i>named-item-64</i> bgp family evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-ipv6 *boolean*

Synopsis	Advertise support for the FlowSpec-IPv6 address family
Context	configure router <i>named-item-64</i> bgp family flow-ipv6 <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure router <i>named-item-64</i> bgp family flow-vpn-ipv4 <i>boolean</i>
Tree	flow-vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	configure router <i>named-item-64</i> bgp family flow-vpn-ipv6 <i>boolean</i>
Tree	flow-vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	configure router <i>named-item-64</i> bgp family ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure router <i>named-item-64</i> bgp family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

l2-vpn boolean

Synopsis Advertise MP-BGP support for the L2-VPN address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family l2-vpn](#) *boolean*
Tree [l2-vpn](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

label-ipv4 boolean

Synopsis Advertise support for the label-IPv4 address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family label-ipv4](#) *boolean*
Tree [label-ipv4](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

label-ipv6 boolean

Synopsis Advertise support for the label-IPv6 address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family label-ipv6](#) *boolean*
Tree [label-ipv6](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mcast-ipv4 boolean

Synopsis Advertise support for the MCAST-IPv4 address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family mcast-ipv4](#) *boolean*
Tree [mcast-ipv4](#)
Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family mcast-ipv6](#) *boolean*
Tree [mcast-ipv6](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mcast-vpn-ipv4 *boolean*

Synopsis Advertise support for the IPv4 VPN MCAST address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family mcast-vpn-ipv4](#) *boolean*
Tree [mcast-vpn-ipv4](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mcast-vpn-ipv6 *boolean*

Synopsis Advertise support for the IPv6 VPN MCAST address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family mcast-vpn-ipv6](#) *boolean*
Tree [mcast-vpn-ipv6](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mdt-safi *boolean*

Synopsis Advertise MP-BGP support for MDT-SAFI address family
Context **configure** [router](#) *named-item-64* [bgp](#) [family mdt-safi](#) *boolean*
Tree [mdt-safi](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure router <i>named-item-64</i> bgp family ms-pw <i>boolean</i>
Tree	ms-pw
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure router <i>named-item-64</i> bgp family route-target <i>boolean</i>
Tree	route-target
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>named-item-64</i> bgp family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>named-item-64</i> bgp family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure router <i>named-item-64</i> bgp family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure router <i>named-item-64</i> bgp family vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure router <i>named-item-64</i> bgp fast-external-failover <i>boolean</i>
Tree	fast-external-failover

Description	When configured to true , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to false , the BGP session remains up until the hold time expires.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>named-item-64</i> bgp graceful-restart
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gr-notification *boolean*

Synopsis	Perform Graceful Restart procedures
Context	configure router <i>named-item-64</i> bgp graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to false , NOTIFICATION messages are not supported.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

long-lived

Synopsis	Enable the long-lived context
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived
Tree	long-lived

Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived family <i>keyword</i>
Tree	family

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived helper-override-stale-time <i>number</i>

Tree	helper-override-stale-time
Description	<p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.</p>
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router <i>named-item-64</i> bgp graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>named-item-64</i> bgp graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>named-item-64</i> bgp graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [*group-name*] *named-item-64*

Synopsis	Enter the group list instance
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i>
Tree	group
Description	Commands in this context define BGP peer groups and their group-specific command options. The options in this context are identical to the global BGP options. Any options that are not overridden by the group-specific commands inherit the configuration settings from the BGP global level.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item-64*

Synopsis	BGP peer group name
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i>
Tree	group
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-paths

Synopsis	Enable the add-paths context
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Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths
Tree	add-paths
Description	<p>Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths evpn receive <i>boolean</i>
Tree	receive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths evpn send (<i>number</i> <i>keyword</i>)
Tree	send
Range	1 to 16

Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths ipv4 receive boolean
Tree	receive
Description	When configured to true , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple routes per IPv6 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of

advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths label-ipv4
Tree	label-ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths label-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send

Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.</p>
Range	1 to 16
Options	<p>all – Send all valid paths for each NLRI</p> <p>multipaths – Number of best multipaths for each NLRI</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths label-ipv6
Tree	label-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths label-ipv6 receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
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Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths <i>label-ipv6</i> send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.</p>
Range	1 to 16
Options	<p>all – Send all valid paths for each NLRI</p> <p>multipaths – Number of best multipaths for each NLRI</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4

Synopsis	Enter the vpn-ipv4 context
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths <i>vpn-ipv4</i>
Tree	vpn-ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths <i>vpn-ipv4</i> receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths vpn-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.</p>
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths vpn-ipv6 receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command allows multiple VPN-IPv6 routes per prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> add-paths vpn-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.</p>
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicapt IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> • If the active route for the IP prefix is a BGP route, that route is advertised.

- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertise unless the active non-BGP route is matched and accepted by an export policy applied to the session
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

advertise-ipv6-next-hops

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [advertise-ipv6-next-hops](#)

Tree [advertise-ipv6-next-hops](#)

Description Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.

When unconfigured, command settings are inherited from a higher level BGP configuration.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

evpn boolean

Synopsis Advertise EVPN route with IPv6 next-hop address

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [advertise-ipv6-next-hops](#) [evpn](#) *boolean*

Tree [evpn](#)

Description When configured to **true**, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.

When configured to **false**, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops ipv4 <i>boolean</i>
Tree	ipv4
Description	<p>When configured to true, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops label-ipv4 <i>boolean</i>
Tree	label-ipv4
Description	<p>When configured to true, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops label-ipv6 <i>boolean</i>
Tree	label-ipv6
Description	<p>When configured to true, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>

Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> aigp <i>boolean</i>
Tree	aigp
Description	<p>When configured to true, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.</p> <p>When configured to false, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> as-override <i>boolean</i>

Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When configured to false, no AS override is performed.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Description	<p>When this command inherits a value of true, the use of 4-byte ASNs is supported.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, this command disables the use of 4-byte ASNs.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	BGP authentication key for peers in the group
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> authentication-keychain reference
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enable the bfd context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd
Tree	bfd
Description	Commands in this context configure the BFD command options for the BGP group.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Multiplier for the BFD session
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of consecutive BFD messages that must be missed from the peer before the BFD session state is changed to down and the upper level protocols (OSPF, IS-IS, BGP, or PIM) are notified of the fault.
Range	1 to 20
Default	3
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-interval *number*

Synopsis	Receive interval for the BFD session
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval for the BFD session
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Type of BFD session endpoint to use
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Processed by the network processor on the CPM auto – System determines the appropriate session type fp – Processed on the forwarding plane hardware
Default	auto
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-strict-mode

Synopsis	Enter the bfd-strict-mode context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd-strict-mode
Tree	bfd-strict-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd-strict-mode advertise
Tree	advertise
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none">• The inherited or configured value for the bfd-liveness command that applies to the peer is true.• The interface associated with the peer has a valid BFD configuration. <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
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Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd-strict-mode advertise holdtime <i>number</i>
Tree	holdtime
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> bfd-strict-mode next-hop-reachability <i>boolean</i>
Tree	next-hop-reachability
Description	<p>When configured to true, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none">• The BFD session to the peer is in a down state.• There is a valid interface BFD configuration that applies to the peer.• There is a valid BFD liveness configuration that applies to the peer. <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is true does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to true only affects routes belonging to the following address families:</p> <ul style="list-style-type: none">• IPv4• IPv6• IPv4 VPN• IPv6 VPN• labeled unicast IPv4

- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

block-prefix-sid *boolean*

Synopsis Block the prefix SID attribute

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **block-prefix-sid** *boolean*

Tree **block-prefix-sid**

Description When configured to **true**, all prefix SID attributes are removed from all routes exchanged between EBGp and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.

When configured to **false**, all prefix SID attributes are propagated without restriction.

A change of this configuration causes the affected BGP sessions to flap.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

capability-negotiation *boolean*

Synopsis Enable capability negotiation

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **capability-negotiation** *boolean*

Tree **capability-negotiation**

Description When configured to **true**, this command enables the exchange of capabilities.

When configured to **false** and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

client-reflect *boolean*

Synopsis Allow cluster RR to advertise routes to its clients

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **client-reflect** *boolean*

Tree [client-reflect](#)

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When the command inherits a value of **true**, client reflection of routes is enabled.

When configured to **false**, this command disables client reflection of routes.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cluster

Synopsis Enter the **cluster** context

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **cluster**

Tree [cluster](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology location

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **cluster** **allow-local-fallback** *boolean*

Tree [allow-local-fallback](#)

Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.

When configured to **false**, no route is advertised to the client.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cluster-id *ipv4-address*

Synopsis	Route reflector cluster ID
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> cluster cluster-id <i>ipv4-address</i>
Tree	cluster-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> cluster orr-location <i>number</i>
Tree	orr-location
Description	<p>This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.</p> <p>With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs are calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damp-peer-oscillations
Tree	damp-peer-oscillations
Description	<p>Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.</p> <p>When unconfigured, command settings are inherited from the global-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damp-peer-oscillations idle-hold-time initial-wait <i>number</i>
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> damping <i>boolean</i>
Tree	damping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	<p>This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.</p> <p>When unconfigured, the setting for this command is inherited from the BGP global-level configuration.</p>
Options	mpls, vxlan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> default-label-preference
Tree	default-label-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> default-label-preference ebgp <i>number</i>
Tree	ebgp

Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> default-label-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-preference

Synopsis	Enter the default-preference context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> default-preference
Tree	default-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> default-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
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Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> <i>default-preference</i> <i>ibgp</i> <i>number</i>
Tree	<i>ibgp</i>
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-route-target *boolean*

Synopsis	Send default RTC route (zero prefix length) to peers
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> <i>default-route-target</i> <i>boolean</i>
Tree	<i>default-route-target</i>
Description	When configured to true , this command sends the default RTC route (zero prefix length) toward the selected peers. When configured to false , a default RTC route is not sent.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> <i>description</i> <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-neighbor

Synopsis	Enter the dynamic-neighbor context
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> <i>dynamic-neighbor</i>
Tree	<i>dynamic-neighbor</i>
Description	Commands in this context configure dynamic BGP sessions for a peer group.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>interface-name</i>
Tree	interface
Description	<p>Commands in this context configure an unnumbered base router network interface for dynamic neighbors.</p> <p>If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.</p> <p>The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.</p> <p>When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGp, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Name of the dynamic neighbor interface
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>interface-name</i> allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	<p>This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i>.</p> <p>All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].</p>
String format	'allowed-peer-as' must be 4-byte decimal AS number or AS..AS range
Max. instances	32
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sessions *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>interface-name</i> max-sessions <i>number</i>
Tree	max-sessions
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor match
Tree	match

Description	Commands in this context configure match conditions for the dynamic neighbors.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Dynamic peer prefix for the group
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	<p>This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i>.</p> <p>All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].</p>
String format	'allowed-peer-as' must be 4-byte decimal AS number or AS..AS range
Max. instances	32

Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-neighbor-limit *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> dynamic-neighbor-limit <i>number</i>
Tree	dynamic-neighbor-limit
Description	<p>This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.</p> <p>When unconfigured, the setting is inherited from the BGP global-level configuration.</p>
Range	1 to 8192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-engineering

Synopsis	Enable the egress-engineering context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> egress-engineering
Tree	egress-engineering
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> egress-engineering admin-state <i>keyword</i>
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for group
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> egress-peer-engineering-label-unicast <i>boolean</i>

Tree	egress-peer-engineering-label-unicast
Description	When configured to true , BGP generates a label-unicast route for each /32 or /128 prefix that corresponds to the BGP group address in the scope of the command. These routes can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. They support the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-handling

Synopsis	Enter the error-handling context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> error-handling
Tree	error-handling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p>

When this command inherits a value of **false**, all errors trigger a session reset.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

export

Synopsis Enable the **export** context

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **export**

Tree **export**

Description Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the **configure policy-options** context.

When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis BGP export policy name

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* **export** *policy* (*policy-expr-string* | *string*)

Tree **policy**

Description This command specifies route policies that control the handling of outbound routes transmitted to certain peers.

Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.

Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or "start@variable@".

String length 1 to 255

String format 'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])

Max. instances 15

Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> extended-nh-encoding
Tree	extended-nh-encoding
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> extended-nh-encoding ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> extended-nh-encoding label-ipv4 <i>boolean</i>

Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> extended-nh-encoding vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family

Synopsis	Enable the family context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family bgp-ls <i>boolean</i>
Tree	bgp-ls
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
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Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-ipv6 *boolean*

Synopsis	Advertise support for the FlowSpec-IPv6 address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family flow-ipv6 <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family flow-vpn-ipv4 <i>boolean</i>
Tree	flow-vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family flow-vpn-ipv6 <i>boolean</i>
Tree	flow-vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Add support for the IPv4 address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l2-vpn boolean

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 boolean

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Advertise support for the label-IPv6 address family

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [family label-ipv6](#) *boolean*

Tree [label-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mcast-ipv4 *boolean*

Synopsis Advertise support for the MCAST-IPv4 address family

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [family mcast-ipv4](#) *boolean*

Tree [mcast-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [family mcast-ipv6](#) *boolean*

Tree [mcast-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mcast-vpn-ipv4 *boolean*

Synopsis Advertise support for the IPv4 VPN MCAST address family

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [family mcast-vpn-ipv4](#) *boolean*

Tree [mcast-vpn-ipv4](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family mdt-safi <i>boolean</i>
Tree	mdt-safi
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family ms-pw <i>boolean</i>
Tree	ms-pw
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
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Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family route-target boolean
Tree	route-target
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family sr-policy-ipv4 boolean
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family sr-policy-ipv6 boolean
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> family vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis Advertise MP-BGP support for IPv6 VPN address family

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *family vpn-ipv6* *boolean*

Tree *vpn-ipv6*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fast-external-failover *boolean*

Synopsis Drop external BGP session immediately when link fails

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *fast-external-failover* *boolean*

Tree *fast-external-failover*

Description When this command inherits a value of **true**, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When configured to **false**, the BGP session remains up until the hold time expires.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enable the **graceful-restart** context

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *graceful-restart*

Tree *graceful-restart*

Description Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.

When the context is unconfigured, the command settings are inherited from the BGP global-level configuration.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	<p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

long-lived

Synopsis	Enable the long-lived context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived
Tree	long-lived
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived family keyword advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	<p>This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.</p>
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived family keyword helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived forwarding-bits-set keyword
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that

the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.

This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).

Options	none, all, non-fwd
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time

Range	1 to 3600
Default	360
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. When unconfigured, the command value is inherited from the BGP global-level setting.
Range	0 3 to 65536
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> hold-time seconds <i>number</i>
Tree	seconds
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP global-level configuration.

Range	0 3 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enable the import context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> import
Tree	import
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p>

Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", @variable@end", or "start@variable@".

String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Description	<p>When configured to true, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> keepalive <i>number</i>
Tree	keepalive
Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the hold-time seconds context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p>

- If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value.
- If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.
- If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command inherits the BGP global-level setting.

Range	0 to 21845
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth
Tree	link-bandwidth
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-from-ebgp

Synopsis	Enter the accept-from-ebgp context
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Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp vpn-ipv6 boolean
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-to-received-ebgp

Synopsis	Enter the add-to-received-ebgp context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
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Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate-used-paths

Synopsis	Enter the aggregate-used-paths context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths label-ipv6 <i>boolean</i>
Tree	label-ipv6

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-to-ebgp

Synopsis	Enter the send-to-ebgp context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
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Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Local IP address used when communicating with BGP peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>interface-name</i>)
Tree	local-address
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-as

Synopsis	Enter the local-as context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> local-as
Tree	local-as
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

as-number *number*

Synopsis Local (or virtual) BGP AS number

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *local-as* *as-number* *number*

Tree *as-number*

Range 1 to 4294967295

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prepend-global-as *boolean*

Synopsis Prepend global ASN when advertising routes to BGP peer

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *local-as* *prepend-global-as* *boolean*

Tree *prepend-global-as*

Description When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.
When configured to **false**, the global ASN is not included in the AS_PATH attribute.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

private *boolean*

Synopsis Hide the local ASN in sent paths learned from peering

Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *local-as* *private* *boolean*

Tree *private*

Description When configured to **true**, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.
When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. range	0 to 4294967295
Options	igp-cost

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multihop *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-self <i>boolean</i>

Tree	next-hop-self
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-unchanged

Synopsis	Enter the next-hop-unchanged context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-unchanged
Tree	next-hop-unchanged
Description	Commands in this context specify the IP address families that allow unchanged BGP next-hops when sending BGP routes to peers in the group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn *boolean*

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-unchanged evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-unchanged label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-unchanged label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-unchanged vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> next-hop-unchanged vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation

Synopsis	Enter the origin-validation context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> origin-validation
Tree	origin-validation

Description	<p>Commands in this context configure the marking of every inbound IPv4, IPv6, labeled IPv4, and labeled IPv6 route from the BGP peer with one of the following origin validation states:</p> <ul style="list-style-type: none"> • Valid (0) • Not-Found (1) • Invalid (2) <p>The configurations apply to all types of BGP peers, but generally should be applied only to EBGp peers and groups that contain only EBGp peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> origin-validation label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound-route-filtering

Synopsis	Enable the outbound-route-filtering context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> outbound-route-filtering
Tree	outbound-route-filtering
Description	<p>Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).</p> <p>When this context is unconfigured, the group command settings are inherited from the BGP global-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-community

Synopsis	Enable the extended-community context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> outbound-route-filtering extended-community
Tree	extended-community
Description	<p>Commands in this context configure the ORF send and receive capabilities based on Extended Communities.</p> <p>When this context is unconfigured, the command settings are inherited from the global-level configuration.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

accept-orf *boolean*

Synopsis Negotiate with peer to accept BGP ORF filters

Context **configure** *router* *named-item-64* **bgp group** *named-item-64* **outbound-route-filtering** **extended-community** **accept-orf** *boolean*

Tree **accept-orf**

Description When configured to **true**, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

send-orf

Synopsis Enable the **send-orf** context

Context **configure** *router* *named-item-64* **bgp group** *named-item-64* **outbound-route-filtering** **extended-community** **send-orf**

Tree **send-orf**

Description Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.

When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route-target [*community-name*] *named-item*

Synopsis Add a list entry for **route-target**

Context **configure** *router* *named-item-64* **bgp group** *named-item-64* **outbound-route-filtering** **extended-community** **send-orf** **route-target** *named-item*

Tree **route-target**

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[community-name] *named-item*

Synopsis Route target community name

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [outbound-route-filtering](#) [extended-community](#) [send-orf](#) [route-target](#) *named-item*

Tree [route-target](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

passive *boolean*

Synopsis Enable passive mode for BGP communication

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [passive](#) *boolean*

Tree [passive](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis Enable Path MTU Discovery

Context **configure** [router](#) *named-item-64* [bgp group](#) *named-item-64* [path-mtu-discovery](#) *boolean*

Tree [path-mtu-discovery](#)

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

peer-as *number*

Synopsis Peer AS number
Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *peer-as* *number*
Tree *peer-as*
Range 1 to 4294967295
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking
Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *peer-ip-tracking* *boolean*
Tree *peer-ip-tracking*
Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

preference *number*

Synopsis Route preference for routes learned from all peers
Context **configure** *router* *named-item-64* *bgp group* *named-item-64* *preference* *number*
Tree *preference*

Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-limit [*family*] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family] *keyword*

Synopsis	Address family to which the limit applies
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-excess *number*

Synopsis	Percentage of maximum routes to install in route table
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp group</i> <i>named-item-64</i> prefix-limit <i>keyword</i> hold-excess <i>number</i>
Tree	hold-excess
Description	This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the post-

import command is configured to **true**, only routes not rejected by import policies count toward the limit.

A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.

This command is mutually exclusive with the **idle-timeout** and **log-only** commands.

Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-timeout *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	configure <i>router</i> <i>named-item-64</i> bgp <i>group</i> <i>named-item-64</i> prefix-limit keyword idle-timeout <i>number</i>
Tree	idle-timeout
Description	<p>This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.</p> <p>When unconfigured, the BGP peer stays down until the operator performs a reset. This command and log-only cannot be configured simultaneously.</p>
Range	1 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure <i>router</i> <i>named-item-64</i> bgp <i>group</i> <i>named-item-64</i> prefix-limit keyword log-only <i>boolean</i>
Tree	log-only
Description	<p>When configured to true, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached.</p> <p>This command and idle-timeout cannot be configured simultaneously.</p> <p>When configured to false, the router generates a log event and takes the BGP session down upon reaching the prefix limit.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> prefix-limit keyword maximum <i>number</i>
Tree	maximum
Description	<p>This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken.</p> <p>When log-only is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.</p>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> prefix-limit keyword post-import <i>boolean</i>
Tree	post-import
Description	<p>When configured to true, the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit.</p> <p>When configured to false, the system limits the number of routes to all routes received from the peer.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> prefix-limit keyword threshold <i>number</i>

Tree	threshold
Range	1 to 100
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-private

Synopsis	Enable the remove-private context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> remove-private
Tree	remove-private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for bgp label-ipv4 routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-communities

Synopsis	Enter the send-communities context
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> send-communities
Tree	send-communities
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p>

When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

large *boolean*

Synopsis Advertise the Large Communities attribute to peers

Context **configure** *router* *named-item-64* **bgp group** *named-item-64* **send-communities large** *boolean*

Tree **large**

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute.

When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

standard *boolean*

Synopsis Advertise the Communities attribute to peers

Context **configure** *router* *named-item-64* **bgp group** *named-item-64* **send-communities standard** *boolean*

Tree **standard**

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP standard communities are sent to peers in the Communities attribute.

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

send-default

Synopsis Enable the **send-default** context

Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> send-default
Tree	send-default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-group *boolean*

Synopsis	Use group for static peers
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> static-group <i>boolean</i>
Tree	static-group
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p>

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

Range	384 to 9746
Options	ip-stack
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i> ttl-security <i>number</i>
Tree	ttl-security
Description	This command configures the minimum TTL value that BGP accepst from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	BGP peer type
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> type <i>keyword</i>
Tree	type
Options	internal, external
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-apply-export boolean

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> vpn-apply-export <i>boolean</i>
Tree	vpn-apply-export
Description	<p>When configured to true, base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the export policies are not applied.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-apply-import boolean

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	configure router <i>named-item-64</i> bgp group <i>named-item-64</i> vpn-apply-import <i>boolean</i>
Tree	vpn-apply-import
Description	<p>When configured to true, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the import policies are not applied.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>hold-time</i>
Tree	<i>hold-time</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>hold-time</i> <i>minimum-hold-time</i> <i>number</i>
Tree	<i>minimum-hold-time</i>
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range	0 3 to 65535
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>hold-time</i> <i>seconds</i> <i>number</i>
Tree	<i>seconds</i>
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none">• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.
Range	0 3 to 65535

Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	configure router <i>named-item-64</i> bgp ibgp-multipath <i>boolean</i>
Tree	ibgp-multipath
Description	<p>When configured to true, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.</p> <p>When configured to false, this command disables IBGP multipath load balancing.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enable the import context
Context	configure router <i>named-item-64</i> bgp import
Tree	import
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context.</p> <p>When no import policies are specified in this context, BGP routes are accepted by default.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	configure router <i>named-item-64</i> bgp import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies a list of objects, where each object is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified

order to determine the modifications of each route and the final action to accept or reject the route.

Only one of the objects referenced by this command is allowed to be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or "start@variable@".

String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	configure <i>router</i> <i>named-item-64</i> bgp initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inter-as-vpn *boolean*

Synopsis	Allow advertisement of VPN routes across AS boundaries
Context	configure <i>router</i> <i>named-item-64</i> bgp inter-as-vpn <i>boolean</i>
Tree	inter-as-vpn
Description	When configured to true , VPNs can exchange routes across AS boundaries, providing model B connectivity. When configured to false , ASBRs are prevented from advertising VPN routes to peers in other ASs.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure router <i>named-item-64</i> bgp keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-allocation

Synopsis	Enter the label-allocation context
Context	configure router <i>named-item-64</i> bgp label-allocation
Tree	label-allocation
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>named-item-64</i> bgp label-allocation label-ipv6
Tree	label-ipv6
Description	This command controls the label allocation behavior for labeled unicast IPv6 routes. The label options are explicit-null and normal .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

explicit-null *boolean*

Synopsis	Apply advertised label and associated programming rules
Context	configure router <i>named-item-64</i> bgp label-allocation label-ipv6 explicit-null <i>boolean</i>

Tree	explicit-null
Description	<p>When configured to true, this command uses the advertised label and associated programming rules on this instance of BGP. The following applies:</p> <ul style="list-style-type: none"> • The router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising. It sets the BGP label value to IPv6 explicit null (value 2), forcing a POP behavior for received packets. • The received label-unicast IPv6 routes never create tunnels in TTM that can be used to resolve other BGP routes (with an IPv6 next-hop). • A received label-unicast IPv6 route can be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP). <p>When configured to false, advertised label IPv6 programming rules are not used. The following applies</p> <ul style="list-style-type: none"> • When the router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising, it sets the BGP label value to a proper value in the dynamic label range and programs a POP or SWAP operation for that label, depending on the origin of the route and various import policy actions that could apply to the route. • Received label-unicast IPv6 routes that have a prefix length of 128 bits are automatically installed in TTM so that they can be used to resolve other (non-labeled-unicast) BGP routes (with an IPv6 next-hop). • A received label-unicast IPv6 route cannot be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP). • The label-ipv6 routes used for ECMP toward an IPv6 destination cannot be a mix of routes with regular label values and routes with special (IPv6 explicit null) label values. <p>Changes in the value of this leaf do not cause the BGP sessions of the base router to reset.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>named-item-64</i> bgp label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Default	170
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-state-route-export *boolean*

Synopsis	Allow the export of the TED NLRI database
Context	configure router <i>named-item-64</i> bgp link-state-route-export <i>boolean</i>
Tree	link-state-route-export
Description	When configured to true , this command allows BGP to export link-state information to BGP neighbors. When configured to false , link-state information is not exported.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-state-route-import *boolean*

Synopsis	Allow the import of the TED NLRI database
Context	configure router <i>named-item-64</i> bgp link-state-route-import <i>boolean</i>
Tree	link-state-route-import
Description	When configured to true , this command enables the import of link-state information into the BGP-LS address family for advertisement to other BGP neighbors. When configured to false , this command disables the import of link-state information.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-as

Synopsis	Enter the local-as context
Context	configure router <i>named-item-64</i> bgp local-as
Tree	local-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Local (or virtual) BGP AS number
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Context	configure <i>router</i> <i>named-item-64</i> <i>bgp local-as as-number number</i>
Tree	<i>as-number</i>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp local-as prepend-global-as boolean</i>
Tree	<i>prepend-global-as</i>
Description	<p>When configured to true, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.</p> <p>When configured to false, the global ASN is hidden in paths announced to the EBGp peer.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp local-as private boolean</i>
Tree	<i>private</i>
Description	<p>When configured to true, the local ASN is hidden in paths learned from the peering.</p> <p>When configured to false, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp local-preference number</i>
Tree	<i>local-preference</i>

Max. range	0 to 4294967295
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>named-item-64</i> bgp loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Default	ignore-loop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure router <i>named-item-64</i> bgp loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>named-item-64</i> bgp med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. range	0 to 4294967295
Options	igp-cost
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	configure <i>router</i> <i>named-item-64</i> bgp min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mp-bgp-keep *boolean*

Synopsis	Keep rejected VPN-IP routes in RIB-IN
Context	configure <i>router</i> <i>named-item-64</i> bgp mp-bgp-keep <i>boolean</i>
Tree	mp-bgp-keep
Description	<p>When configured to true, the RIB-IN retains all MP-BGP routes, including VPN routes rejected by import policies or not imported by any services. As a result, sending Route Refresh messages is not required when an import policy changes.</p> <p>When configured to false, these VPN routes are deleted from the RIB-IN.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multihop *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure <i>router</i> <i>named-item-64</i> bgp multihop <i>number</i>
Tree	multihop
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGp peer multiple hops away. This command applies only to EBGp.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipath

Synopsis	Enter the multipath context
Context	configure router <i>named-item-64</i> bgp multipath
Tree	multipath
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Maximum multipaths per prefix for EBGp learned routes
Context	configure router <i>named-item-64</i> bgp multipath ebgp <i>number</i>
Tree	ebgp
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [\[family-type\]](#) *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> bgp multipath family <i>keyword</i>
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Address family for which multipath selection
Context	configure router <i>named-item-64</i> bgp multipath family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp multipath family</i> <i>keyword</i> <i>ebgp number</i>
Tree	<i>ebgp</i>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp number

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp multipath family</i> <i>keyword</i> <i>ibgp number</i>
Tree	<i>ibgp</i>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-paths number

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp multipath family</i> <i>keyword</i> <i>max-paths number</i>
Tree	<i>max-paths</i>
Description	<p>This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the family command.</p> <p>Consider the following when configuring this command:</p> <ul style="list-style-type: none">• If the best path is an EBGp-learned route and the ebgp command is configured, the limit configured in the ebgp command overrides the limit configured in this command.

- If the best path is an IBGP-learned route and the **ibgp** command is configured, the limit configured in the **ibgp** command overrides the limit configured in this command.
- If the best path is an EBGP-learned route and the **ebgp** command is not configured, and this command is configured to 1, multipaths are disabled.
- If the best path is an IBGP-learned route and the **ibgp** command is not configured, and this command is configured to 1, multipaths are disabled.

Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>multipath</i> <i>family</i> <i>keyword</i> restrict <i>keyword</i>
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>multipath</i> <i>family</i> <i>keyword</i> unequal-cost <i>boolean</i>
Tree	unequal-cost
Description	When configured to true , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>multipath</i> ibgp <i>number</i>
Tree	ibgp

Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-paths *number*

Synopsis	Maximum multipaths per prefix
Context	configure router <i>named-item-64</i> bgp multipath max-paths <i>number</i>
Tree	max-paths
Range	1 to 64
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure router <i>named-item-64</i> bgp multipath restrict <i>keyword</i>
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure router <i>named-item-64</i> bgp multipath unequal-cost <i>boolean</i>
Tree	unequal-cost
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [ip-address] (ipv4-address-with-zone | ipv6-address-with-zone)

Synopsis	Enter the neighbor list instance
Context	configure router <i>named-item-64</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone)
Tree	neighbor
Description	Commands in this context configure a BGP peer or neighbor instance within the context of the BGP group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (ipv4-address-with-zone | ipv6-address-with-zone)

Synopsis	IP address of the BGP peer router
Context	configure router <i>named-item-64</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone)
Tree	neighbor
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-paths

Synopsis	Enable the add-paths context
Context	configure router <i>named-item-64</i> bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) add-paths
Tree	add-paths
Description	Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths evpn receive <i>boolean</i>
Tree	receive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths evpn send (<i>number</i> <i>keyword</i>)
Tree	send
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple routes per IPv6 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv4
Tree	label-ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.

Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6
Tree	label-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4

Synopsis	Enter the vpn-ipv4 context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4
Tree	vpn-ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple VPN-IPv4 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send

Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	all – Send all valid paths for each NLRI multipaths – Number of best multipaths for each NLRI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive boolean

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send (number | keyword)

Synopsis	Maximum paths per VPN-IPv6 prefix
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Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.</p>
Range	1 to 16
Options	<p>all – Send all valid paths for each NLRI</p> <p>multipaths – Number of best multipaths for each NLRI</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> • If the active route for the IP prefix is a BGP route, that route is advertised. • If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

advertise-ipv6-next-hops

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-ipv6-next-hops**

Tree **advertise-ipv6-next-hops**

Description Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.

When unconfigured, command settings are inherited from a higher level BGP configuration.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

evpn boolean

Synopsis Advertise EVPN route with IPv6 next-hop address

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-ipv6-next-hops evpn boolean**

Tree **evpn**

Description When configured to **true**, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.

When configured to **false**, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv4 boolean

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops ipv4 boolean
Tree	ipv4
Description	<p>When configured to true, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 boolean

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops label-ipv4 boolean
Tree	label-ipv4
Description	<p>When configured to true, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops label-ipv6 <i>boolean</i>
Tree	label-ipv6
Description	<p>When configured to true, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>

Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-ldp-prefix *boolean*

Synopsis	Advertise active /32 LDP FEC prefixes to BGP peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ldp-prefix <i>boolean</i>
Tree	advertise-ldp-prefix
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) aigp <i>boolean</i>
Tree	aigp
Description	When configured to true , this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an

associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

as-override *boolean*

Synopsis Replace the peer's ASN with the local ASN in AS Path

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **as-override** *boolean*

Tree **as-override**

Description When configured to **true**, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.

This command should be used with caution, as it breaks BGP's loop detection mechanism.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). This command cannot be explicitly configured to **false**.

When configured to **false**, no AS override is performed.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

asn-4-byte *boolean*

Synopsis Advertise the use of 4-byte ASNs

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **asn-4-byte** *boolean*

Tree **asn-4-byte**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis BGP authentication key

Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	This command specifies the BGP authentication key peers in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enable the bfd context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd
Tree	bfd
Description	Commands in this context configure the BFD command options for the BGP neighbor.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Multiplier for the BFD session
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of consecutive BFD messages that must be missed from the peer before the BFD session state is changed to down and the upper level protocols (OSPF, IS-IS, BGP, or PIM) are notified of the fault.
Range	1 to 20
Default	3
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-interval *number*

Synopsis	Receive interval for the BFD session
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval for the BFD session
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Type of BFD session endpoint to use
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Processed by the network processor on the CPM auto – System determines the appropriate session type fp – Processed on the forwarding plane hardware
Default	auto
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

bfd-liveness boolean

Synopsis	Enable BFD
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-strict-mode

Synopsis	Enter the bfd-strict-mode context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-strict-mode
Tree	bfd-strict-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-strict-mode advertise
Tree	advertise
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none">• The inherited or configured value for the bfd-liveness command that applies to the peer is true.• The interface associated with the peer has a valid BFD configuration. <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-strict-mode advertise holdtime <i>number</i>
Tree	holdtime
Description	<p>This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.</p>
Range	1 to 65535
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
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Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-strict-mode next-hop-reachability <i>boolean</i>
Tree	next-hop-reachability
Description	<p>When configured to true, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"> • The BFD session to the peer is in a down state. • There is a valid interface BFD configuration that applies to the peer. • There is a valid BFD liveness configuration that applies to the peer. <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer. The behavior of the router when this command is true does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to true only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"> • IPv4 • IPv6 • IPv4 VPN • IPv6 VPN • labeled unicast IPv4 • labeled unicast IPv6 • EVPN • IPv4 multicast • IPv6 multicast • IPv4 VPN multicast • IPv6 VPN multicast <p>When configured to false, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) block-prefix-sid <i>boolean</i>
Tree	block-prefix-sid
Description	<p>When configured to true, all prefix SID attributes are removed from all routes exchanged between EBGp and IBGP peers covered by the scope of the command. Locally imposed prefix SID attributes are also removed.</p> <p>When configured to false, all prefix SID attributes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) capability-negotiation <i>boolean</i>
Tree	capability-negotiation
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) client-reflect <i>boolean</i>
Tree	client-reflect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster

Synopsis	Enter the cluster context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster
Tree	cluster
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **cluster allow-local-fallback** *boolean*

Tree **allow-local-fallback**

Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.
When configured to **false**, this command no route is advertised to the client.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cluster-id *ipv4-address*

Synopsis Route reflector cluster ID

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **cluster cluster-id** *ipv4-address*

Tree **cluster-id**

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

orr-location *number*

Synopsis Optimal route reflection location for the cluster

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **cluster orr-location** *number*

Tree **orr-location**

Description This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.
With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS

implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.

Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations
Tree	damp-peer-oscillations
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

idle-hold-time

Synopsis Enter the **idle-hold-time** context

Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [damp-peer-oscillations](#) [idle-hold-time](#)

Tree [idle-hold-time](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

initial-wait number

Synopsis Time session remains in idle state after stabilization

Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [damp-peer-oscillations](#) [idle-hold-time](#) [initial-wait](#) *number*

Tree [initial-wait](#)

Range 0 to 2048

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-wait number

Synopsis Maximum session idle time after repeated instability

Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [damp-peer-oscillations](#) [idle-hold-time](#) [max-wait](#) *number*

Tree [max-wait](#)

Range 1 to 2048

Default 60

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

second-wait number

Synopsis Time that doubles after each repeated session failure

Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damping <i>boolean</i>
Tree	damping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	<p>This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.</p> <p>When unconfigured, the setting for this command is inherited from the BGP group-level configuration.</p>
Options	mpls, vxlan
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-label-preference

Synopsis	Enter the default-label-preference context
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference
Tree	default-label-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-preference

Synopsis	Enter the default-preference context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference
Tree	default-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-route-target boolean

Synopsis	Send default RTC route (zero prefix length) to peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-route-target boolean
Tree	default-route-target
Description	<p>When configured to true, this command sends the default RTC route (zero prefix length) toward the selected peers.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, a default RTC route is not sent.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description description

Synopsis	Text description
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-engineering

Synopsis	Enable the egress-engineering context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-engineering
Tree	egress-engineering
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-engineering admin-state <i>keyword</i>
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for neighbor
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-peer-engineering-label-unicast <i>boolean</i>
Tree	egress-peer-engineering-label-unicast
Description	When configured to true , BGP generates a label-unicast route for the /32 or /128 prefix that corresponds to the BGP neighbor address. This route can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. This supports the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Description	<p>When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, received routes are not checked for compliance with the rule.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-handling

Synopsis	Enter the error-handling context
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling
Tree	error-handling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	When configured to true , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, all errors trigger a session reset.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

export

Synopsis Enable the **export** context

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **export**

Tree **export**

Description Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the **configure policy-options** context.

When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis BGP export policy name

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **export policy** (*policy-expr-string* | *string*)

Tree **policy**

Description This command specifies route policies that control the handling of outbound routes transmitted to certain peers.

Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.

Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".

String length 1 to 255

String format 'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])

Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding
Tree	extended-nh-encoding
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Advertise encoding capability for IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family

Synopsis	Enable the family context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family bgp-ls <i>boolean</i>
Tree	bgp-ls
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn boolean

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family evpn boolean
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-ipv6 boolean

Synopsis	Advertise support for the FlowSpec-IPv6 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-ipv6 boolean
Tree	flow-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-vpn-ipv4 boolean

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-vpn-ipv4 boolean
Tree	flow-vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-vpn-ipv6 boolean

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-vpn-ipv6 boolean
Tree	flow-vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Add support for the IPv4 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l2-vpn boolean

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family l2-vpn boolean
Tree	l2-vpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mdt-safi <i>boolean</i>
Tree	mdt-safi
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ms-pw <i>boolean</i>
Tree	ms-pw
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family route-target <i>boolean</i>
Tree	route-target
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
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Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	When this command inherits a value of true , the router drops an external BGP session on a single-hop route immediately when the local interface goes down.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When configured to **false**, the BGP session remains up until the hold time expires.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enable the **graceful-restart** context

Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [graceful-restart](#)

Tree [graceful-restart](#)

Description Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.

When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

gr-notification *boolean*

Synopsis Perform graceful restart procedures after NOTIFICATION

Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [graceful-restart](#) [gr-notification](#) *boolean*

Tree [gr-notification](#)

Description When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to **false**, NOTIFICATION messages are not supported.

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

long-lived

Synopsis Enable the **long-lived** context

Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived
Tree	long-lived
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family keyword
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family keyword
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family keyword advertised-stale-time number
Tree	advertised-stale-time
Description	<p>This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.</p>
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family keyword helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived forwarding-bits-set keyword
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fw
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-restart-time <i>number</i>

Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	<p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.</p>
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *reference*



WARNING:

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

Synopsis	BGP peer group
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) group <i>reference</i>
Tree	group

Reference	configure <i>router</i> <i>named-item-64</i> bgp group <i>named-item-64</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Range	0 3 to 65536
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Maximum hold time between successive messages
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time seconds <i>number</i>
Tree	seconds
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p>

- If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.
- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP group-level configuration.

Range	0 3 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enable the import context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import
Tree	import
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context.</p> <p>When this context is unconfigured, the policy association is inherited from the BGP group-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Names of the BGP import policies
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p>

Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", @variable@end", or "start@variable@".

String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) initial-send-delay-zero <i>boolean</i>
Tree	initial-send-delay-zero
Description	<p>When configured to true, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l2vpn-cisco-interop *boolean*

Synopsis	Allow translation from Cisco non-compliant NLRI format
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) l2vpn-cisco-interop <i>boolean</i>
Tree	l2vpn-cisco-interop
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth
Tree	link-bandwidth
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-from-ebgp

Synopsis	Enable the accept-from-ebgp context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth accept-from-ebgp** **ipv4** *boolean*

Tree [ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth accept-from-ebgp** **ipv6** *boolean*

Tree [ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth accept-from-ebgp** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp vpn-ipv6 boolean
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-to-received-ebgp

Synopsis	Enable the add-to-received-ebgp context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate-used-paths

Synopsis	Enable the aggregate-used-paths context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths vpn-ipv6 boolean
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-to-ebgp

Synopsis	Enable the send-to-ebgp context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv4 boolean
Tree	ipv4
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
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Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Local IP address used when communicating with BGP peers
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>interface-name</i>)
Tree	local-address
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-as

Synopsis	Enter the local-as context
Context	configure <i>router</i> <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as
Tree	local-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) med-out (<i>number</i> <i>keyword</i>)
Tree	med-out

Max. range	0 to 4294967295
Options	igp-cost
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multihop *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipath-eligible *boolean*

Synopsis	Allow routes from this peer in multipath eligibility
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure <i>router named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-self <i>boolean</i>
Tree	next-hop-self
Description	<p>When configured to true, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the configure router bgp rr-vpn-forwarding command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, protocol standard behavior is applied to determine whether to set next-hop-self in advertised routes.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-unchanged

Synopsis	Enable the next-hop-unchanged context
Context	configure <i>router named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged
Tree	next-hop-unchanged
Description	Commands in this context specify the IP address families where the next hop remains unchanged when sending BGP routes to peers of the neighbor.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn *boolean*

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	configure <i>router named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis Advertise label-IPv4 routes with unchanged BGP next hop

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **next-hop-unchanged** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Advertise label-IPv6 routes with unchanged BGP next hop

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **next-hop-unchanged** **label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis Advertise VPN IPv4 routes with unchanged BGP next hop

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **next-hop-unchanged** **vpn-ipv4** *boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis Advertise VPN IPv6 routes with unchanged BGP next hop

Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation

Synopsis	Enable the origin-validation context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation
Tree	origin-validation
Description	<p>Commands in this context configure the marking of every inbound IPv4, IPv6, labeled IPv4, and labeled IPv6 route from the BGP peer with one of the following origin validation states:</p> <ul style="list-style-type: none"> Valid (0) Not-Found (1) Invalid (2) <p>The configurations apply to all types of BGP peers, but generally should be applied only to EBGP peers and groups that contain only EBGP peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Enable support for unlabeled unicast IPv6 routes
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Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound-route-filtering

Synopsis	Enable the outbound-route-filtering context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering
Tree	outbound-route-filtering
Description	<p>Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-community

Synopsis	Enable the extended-community context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering extended-community
Tree	extended-community
Description	<p>Commands in this context configure the ORF send and receive capabilities based on Extended Communities.</p> <p>When this context is unconfigured, the command settings are inherited from the group-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering extended-community accept-orf <i>boolean</i>
Tree	accept-orf
Description	<p>When configured to true, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-orf

Synopsis	Enable the send-orf context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf
Tree	send-orf

Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target [[community-name](#)] *named-item*

Synopsis	Add a list entry for route-target
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf route-target <i>named-item</i>
Tree	route-target
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[community-name] *named-item*

Synopsis	Route target community name
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf route-target <i>named-item</i>
Tree	route-target
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Use passive mode for BGP communication
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) passive <i>boolean</i>
Tree	passive

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis	Enable path MTU discovery
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-as *number*

Synopsis	Peer AS number
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-as <i>number</i>
Tree	peer-as
Description	<p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p>
Range	1 to 4294967295
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

peer-creation-type *keyword*

Synopsis Peer creation type

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **peer-creation-type** *keyword*

Tree [peer-creation-type](#)

Options static, dynamic, dynamic-if-remote, dynamic-if-local

Default static

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

peer-ip-tracking *boolean*

Synopsis Enable BGP peer tracking

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **peer-ip-tracking** *boolean*

Tree [peer-ip-tracking](#)

Description When configured to **true**, this command enables BGP peer tracking.

Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

preference *number*

Synopsis Route preference for routes learned from all peers

Context **configure** **router** *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **preference** *number*

Tree [preference](#)

Description This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

When unconfigured, the command setting is inherited from the group-level configuration.

Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-limit [[family](#)] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family] *keyword*

Synopsis	Address family to which the limit applies
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-excess *number*

Synopsis	Percentage of maximum routes to install in route table
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> hold-excess <i>number</i>
Tree	hold-excess

Description	<p>This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the post-import command is configured to true, only routes not rejected by import policies count toward the limit.</p> <p>A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.</p> <p>This command is mutually exclusive with the idle-timeout and log-only commands.</p>
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-timeout *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword idle-timeout <i>number</i>
Tree	idle-timeout
Description	<p>This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer.</p> <p>When unconfigured, the command inherits the value from the group-level configuration.</p>
Range	1 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword post-import <i>boolean</i>
Tree	post-import
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-private

Synopsis	Enable the remove-private context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private
Tree	remove-private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

selective-label-ipv4-install *boolean*

Synopsis Enable selective download for BGP label-ipv4 routes
Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [selective-label-ipv4-install](#) *boolean*
Tree [selective-label-ipv4-install](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

send-communities

Synopsis Enter the **send-communities** context
Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [send-communities](#)
Tree [send-communities](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

extended *boolean*

Synopsis Advertise the Extended Communities attribute to peers
Context **configure** [router](#) *named-item-64* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [send-communities extended](#) *boolean*
Tree [extended](#)
Description When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.
When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute.
When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

large boolean

Synopsis	Advertise the Large Communities attribute to peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities large boolean
Tree	large
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standard boolean

Synopsis	Advertise the Communities attribute to peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities standard boolean
Tree	standard
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-default

Synopsis	Enable the send-default context
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default
Tree	send-default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) split-horizon <i>boolean</i>
Tree	split-horizon

Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ttl-security <i>number</i>
Tree	ttl-security
Description	<p>This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.</p> <p>When unconfigured, the command inherits the value of the group-level setting.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	BGP peer type
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) type <i>keyword</i>
Tree	type
Options	internal, external
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure router <i>named-item-64</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) vpn-apply-export <i>boolean</i>
Tree	vpn-apply-export
Description	<p>When configured to true, base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p>

When this command inherits a value of **false**, the export policies are not applied.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

vpn-apply-import *boolean*

Synopsis Apply base-instance BGP import policies to VPN routes

Context **configure** *router* *named-item-64* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **vpn-apply-import** *boolean*

Tree **vpn-apply-import**

Description When configured to **true**, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

neighbor-trust

Synopsis Enter the **neighbor-trust** context

Context **configure** *router* *named-item-64* **bgp neighbor-trust**

Tree **neighbor-trust**

Description Commands in this context enable a label security feature at an inter-AS boundary for the specified IP families.

This label security feature allows the configuration of a router, acting in a PE or in an ASBR role, to accept packets of VPN-IP or EVPN prefixes only from direct EBGP neighbors to which it advertised a service label.

The untrusted state identifies the participating interfaces. The router supports a maximum of 15 network interfaces that can participate in this feature.

At a high level, BGP tracks each direct EBGP neighbor over an untrusted interface and to which it sent a prefix label. For each of those prefixes, BGP programs a bit map in the ILM record that indicates, on a per-untrusted interface basis, whether the matching received packets must be forwarded or dropped.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

evpn boolean

Synopsis	Enable inter-AS label security for the EVPN family
Context	configure router <i>named-item-64</i> bgp neighbor-trust evpn boolean
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 boolean

Synopsis	Enable inter-AS label security for the VPN-IPv4 family
Context	configure router <i>named-item-64</i> bgp neighbor-trust vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 boolean

Synopsis	Enable inter-AS label security for the VPN-IPv6 family
Context	configure router <i>named-item-64</i> bgp neighbor-trust vpn-ipv6 boolean
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-resolution

Synopsis	Enter the next-hop-resolution context
Context	configure router <i>named-item-64</i> bgp next-hop-resolution
Tree	next-hop-resolution
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-unresolved-leaking *boolean*

Synopsis	Allow unresolved BGP routes to be leaked to VPRN routes
Context	configure router <i>named-item-64</i> bgp next-hop-resolution allow-unresolved-leaking <i>boolean</i>
Tree	allow-unresolved-leaking
Description	<p>When configured to true, this command instructs BGP in the base router instance to allow its routes to be leaked to other (VPRN) BGP instances even if the routes to be leaked do not have a BGP next-hop that can be resolved by the base instance.</p> <p>When configured to false, VPRN cannot import a route.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

labeled-routes

Synopsis	Enter the labeled-routes context
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes
Tree	labeled-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-static *boolean*

Synopsis	Allow static routes to resolve BGP next-hop
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes allow-static <i>boolean</i>
Tree	allow-static
Description	<p>When configured to true, the BGP next-hop of label-IPv4, label-IPv6, VPN-IPv4, and VPN-IPv6 routes received from any EBGp or IBGP peer can be resolved using static routes, except for static default routes (0/0 and ::/0).</p> <p>A static route is less preferred than a local or interface route for resolving the BGP next-hop of labeled route but is more preferred than other IGP routes or tunnels.</p> <p>When configured to false, BGP next-hop resolution using static routes is not allowed.</p> <p>A label-IPv4 or label-IPv6 route can be resolved by a static blackhole route, even when this command is configured to false, but only if the static blackhole route is the longest prefix match (LPM) static route for the BGP next-hop address.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rr-use-route-table *boolean*

Synopsis	Use RTM to resolve BGP next-hop if TTM resolution fails
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>rr-use-route-table</i> <i>boolean</i>
Tree	<i>rr-use-route-table</i>
Description	<p>When configured to true, this command enables BGP to perform a lookup of IGP routes in the route table to resolve the BGP next-hop of label-IPv4 and label-IPv6 routes. This is useful for a Route Reflector (RR) that does not participate in tunnel signaling protocols such as LDP and RSVP and therefore, does not have tunnels to resolve the BGP next-hops of label-unicast routes.</p> <p>Disable route table installation (via the route-table-install command) before setting this command to true; otherwise, forwarding of label routes resolved in this way will be incorrect.</p> <p>When configured to false, RTM next-hop resolution is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transport-tunnel

Synopsis	Enter the transport-tunnel context
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i>
Tree	<i>transport-tunnel</i>
Description	Commands in this context configure options for the next-hop resolution of BGP labeled routes (VPN-IP and labeled-unicast) using tunnels in TTM.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i>

Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Address family type for tunnel selection
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i>
Tree	family
Options	vpn, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging

Description	<p>When configured to true, the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered.</p> <p>When configured to false, matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-untagged-route *keyword*

Synopsis	Untagged route type enforcement
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> enforce-untagged-route <i>keyword</i>
Tree	enforce-untagged-route
Description	<p>This command configures the enforcement of BGP routes with no administrative tag policy applied by modifying the next-hop resolution behavior for autobind services.</p> <p>If the untagged-tunnel option is configured, untagged routes only bind to LSPs with no administrative tag configured. If both tagged and untagged tunnels to the next hop exist, the system only considers the untagged tunnels. If no untagged tunnels to the next hop exist, the resolution of untagged routes fails.</p> <p>The untagged-tunnel option can be used in combination with the enforce-strict-tunnel-tagging command configured to true, in which case tagged routes resolve to tagged LSPs, and untagged routes only resolve to untagged LSPs.</p> <p>When unconfigured, untagged routes can bind to tagged or untagged LSPs.</p>
Options	<p>none – Untagged routes can bind to tagged or untagged LSPs</p> <p>untagged-tunnel – Untagged routes only bind to LSPs without an admin tag</p>
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Options	none, filter, any

Default	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to false , BGP tunneling for next-hop resolution is not enabled.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	When configured to true , this command enables the selection of LDP tunneling for next-hop resolution and specifies the LDP tunnels in the tunnel table corresponding to /32 IPv4 FECs and /128 IPv6 FECs. When configured to false , LDP tunneling for next-hop resolution is not enabled.
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter rsvp boolean
Tree	rsvp
Description	<p>When configured to true, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-isis boolean
Tree	sr-isis
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP labeled routes.</p> <p>This command allows BGP to use the SR tunnel in the tunnel table submitted by the lowest preference IS-IS instance. In the case of a tie, the IS-IS instance with the lowest metric SR tunnel is selected over the lowest numbered IS-IS instance.</p> <p>When configured to false, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-ospf <i>boolean</i>
Tree	sr-ospf
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP labeled routes.</p> <p>This command allows BGP to use the SR tunnel in the tunnel table submitted by the lowest preference OSPF instance. In the case of a tie, the OSPF instance with the lowest metric SR tunnel is selected over the lowest numbered OSPF instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 boolean

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Description	<p>When configured to true, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP labeled routes.</p> <p>This command allows BGP to use the SR tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance. In the case of a tie, the OSPFv3 instance with the lowest metric SR tunnel is selected over the lowest numbered OSPFv3 instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure <i>router</i> <i>named-item-64</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of SR policies to resolve the next hop of BGP routes.</p> <p>The SR policies are statically configured in the local router or learned through BGP routes (AFI 1/SAFI 73 or AFI 2/SAFI 73). BGP resolves a labeled IPv4 route with an IPv4 next-hop address or a labeled IPv6 route with IPv4-mapped IPv6 next-hop address using an SR policy selected by applying the following procedure in preference order:</p> <ul style="list-style-type: none"> • IPv4 endpoint - The next hop must match the endpoint of the SR policy and the highest numbered color extended community attached to the labeled IPv4 or IPv6 route must match the color of the SR policy. • null IPv4 endpoint (0.0.0.0) - The highest numbered color extended community attached to the labeled IPv4 or IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'. • null IPv6 endpoint (0::0) - The highest numbered color extended community attached to the labeled IPv4 or IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'. <p>BGP resolves a labeled IPv6 route with an IPv6 next hop that is not an IPv4-mapped IPv6 address using an SR policy selected by applying the following procedure in preference order:</p> <ul style="list-style-type: none"> • IPv6 endpoint - The next hop must match the endpoint of the SR policy and the highest numbered color extended community attached to the labeled IPv6 route must match the color of the SR policy. • null IPv6 endpoint (0::0) - The highest numbered color extended community attached to the labeled IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'. • null IPv4 endpoint (0.0.0.0) - The highest numbered color extended community attached to the labeled IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'. <p>When configured to false, SR policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
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Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>sr-te</i> <i>boolean</i>
Tree	<i>sr-te</i>
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>udp</i> <i>boolean</i>
Tree	<i>udp</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-bgp-routes

Synopsis	Enter the use-bgp-routes context
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>use-bgp-routes</i>
Tree	<i>use-bgp-routes</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6-explicit-null *boolean*

Synopsis	Use BGP routes to resolve address family routes
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>use-bgp-routes</i> <i>label-ipv6-explicit-null</i> <i>boolean</i>

Tree	label-ipv6-explicit-null
Description	<p>When configured to true, a labeled IPv6 route with the explicit-null label can be resolved by other routes, and also by unlabeled IPv4 routes and unlabeled IPv6 routes that are resolved by static routes, interface routes, or tunnels. Up to four levels of recursive resolution are supported when the top route is a labeled IPv6 route with an explicit-null label. When disabled, a labeled IPv6 route cannot be resolved by other labeled IPv6 routes.</p> <p>A labeled IPv6 route with a regular label (not explicit-null) is never resolved by other labeled IPv6 routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution policy <i>reference</i>
Tree	policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

shortcut-tunnel

Synopsis	Enter the shortcut-tunnel context
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel
Tree	shortcut-tunnel
Description	Commands in this context configure the tunnel types that can be used to resolve unlabeled IPv4 and IPv6 BGP routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i>
Tree	family

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Address family type for shortcut tunnel selection
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

disallow-igp *boolean*

Synopsis	Do not perform route table lookup to resolve BGP route
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> disallow-igp <i>boolean</i>
Tree	disallow-igp
Description	When configured to true , no attempt is made to resolve the IPv4 or IPv6 BGP route using route table lookup if no resolving tunnel can be found in the tunnel table.

When configured to **false**, route table lookup can be performed if no resolving tunnel is found in the tunnel table.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Description	<p>When configured to true, the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered.</p> <p>When configured to false, matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-untagged-route *keyword*

Synopsis	Untagged route type enforcement
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> enforce-untagged-route <i>keyword</i>
Tree	enforce-untagged-route
Description	<p>This command configures the enforcement of BGP routes with no administrative tag policy applied by modifying the next-hop resolution behavior for autobind services.</p> <p>If the untagged-tunnel option is configured, untagged routes only bind to LSPs with no administrative tag configured. If both tagged and untagged tunnels to the next hop exist, the system only considers the untagged tunnels. If no untagged tunnels to the next hop exist, the resolution of untagged routes fails.</p> <p>The untagged-tunnel option can be used in combination with the enforce-strict-tunnel-tagging command configured to true, in which case tagged routes resolve to tagged LSPs, and untagged routes only resolve to untagged LSPs.</p> <p>When unconfigured, untagged routes can bind to tagged or untagged LSPs.</p>
Options	none – Untagged routes can bind to tagged or untagged LSPs

	untagged-tunnel – Untagged routes only bind to LSPs without an admin tag
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution keyword

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Options	none, filter, any
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp boolean

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to false , BGP tunneling for next-hop resolution is not enabled.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter ldp boolean
Tree	ldp
Description	<p>When configured to true, BGP selects the LDP FEC that is the longest prefix match to the BGP next-hop address.</p> <p>When configured to false, LDP tunneling for next-hop resolution is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter rsvp boolean
Tree	rsvp
Description	<p>When configured to true, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
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Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>sr-isis</i> <i>boolean</i>
Tree	<i>sr-isis</i>
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes.</p> <p>This command allows BGP to use the SR tunnel in the tunnel table submitted by the lowest preference IS-IS instance. In the case of a tie, the IS-IS instance with the lowest metric SR tunnel is selected over the lowest numbered IS-IS instance.</p> <p>When configured to false, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>sr-ospf</i> <i>boolean</i>
Tree	<i>sr-ospf</i>
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes.</p> <p>This command allows BGP to use the SR tunnel in the tunnel table submitted by the lowest preference OSPF instance. In the case of a tie, the OSPF instance with the lowest metric SR tunnel is selected over the lowest numbered OSPF instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure <i>router</i> <i>named-item-64</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>sr-ospf3</i> <i>boolean</i>
Tree	<i>sr-ospf3</i>

Description	<p>When configured to true, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes.</p> <p>This command allows BGP to use the SR tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance. In the case of a tie, the OSPFv3 instance with the lowest metric SR tunnel is selected over the lowest numbered OSPFv3 instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of SR policies to resolve the next hop of BGP routes.</p> <p>The SR policies are statically configured in the local router or learned through BGP routes (AFI 1/SAFI 73 or AFI 2/SAFI 73). BGP resolves an IPv4 route with an IPv4 next-hop address or an IPv6 route with IPv4-mapped IPv6 next-hop address using an SR policy selected by applying the following procedure in preference order:</p> <ul style="list-style-type: none"> • IPv4 endpoint - The next hop must match the endpoint of the SR policy and the highest numbered color extended community attached to the IPv4 or IPv6 route must match the color of the SR policy. • null IPv4 endpoint (0.0.0.0) - The highest numbered color extended community attached to the IPv4 or IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'. • null IPv6 endpoint (0::0) - The highest numbered color extended community attached to the IPv4 or IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'. <p>BGP resolves an IPv6 route with an IPv6 next hop that is not an IPv4-mapped IPv6 address using an SR policy selected by applying the following procedure in preference order:</p> <ul style="list-style-type: none"> • IPv6 endpoint - The next hop must match the endpoint of the SR policy and the highest numbered color extended community attached to the IPv6 route must match the color of the SR policy. • null IPv6 endpoint (0:::0) - The highest numbered color extended community attached to the IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'.

- **null IPv4 endpoint (0.0.0.0)** - The highest numbered color extended community attached to the IPv6 route must match the color of the SR policy and its color bits must be set to '01' or '10'.

When configured to **false**, SR policies are not enabled for next-hop resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te boolean

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-te boolean
Tree	sr-te
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-bgp-routes boolean

Synopsis	Use BGP routes to resolve BGP next hops
Context	configure router <i>named-item-64</i> bgp next-hop-resolution use-bgp-routes boolean
Tree	use-bgp-routes
Description	<p>This command enables the use of BGP routes to resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p>
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-leaked-routes

Synopsis	Enter the use-leaked-routes context
Context	configure router <i>named-item-64</i> bgp next-hop-resolution use-leaked-routes
Tree	use-leaked-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static *boolean*

Synopsis	Use leaked static routes to resolve BGP next hop
Context	configure router <i>named-item-64</i> bgp next-hop-resolution use-leaked-routes static <i>boolean</i>
Tree	static
Description	<p>When configured to true, the router allows any non-leaked unlabeled unicast IPv4 or IPv6 route in the BGP RIB to be resolved by a leaked static route with direct next hops. A BGP route resolved this way cannot resolve other routes (including BGP routes) and cannot be redistributed into non-BGP protocols, such as IGP.</p> <p>When configured to false, the router prevents the use of leaked static routes to resolve BGP routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-family-policy *reference*

Synopsis	Policy to filter routes for next-hop resolution
Context	configure router <i>named-item-64</i> bgp next-hop-resolution vpn-family-policy <i>reference</i>
Tree	vpn-family-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Use weighted ECMP for next-hop tunnel selection for 6PE
Context	configure router <i>named-item-64</i> bgp next-hop-resolution weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, this command enables weighted ECMP for next-hop tunnel selection for 6PE. When weighted ECMP is enabled, the RSVP-TE tunnel used to forward 6PE packets to the ECMP next hop that is chosen according to the outcome of the hash on the packet at the normalized load-balancing weight of the tunnel.</p> <p>When configured to false, weighted ECMP is disabled for next-hop tunnel selection for 6PE.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

optimal-route-reflection

Synopsis	Enter the optimal-route-reflection context
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection
Tree	optimal-route-reflection
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location [*location-id*] *number*

Synopsis	Enter the location list instance
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection location <i>number</i>
Tree	location
Description	<p>Commands in this context configure the location ID for the route reflector. A BGP neighbor can be associated with a location if it is a route-reflector client.</p> <p>Up to three IPv4 addresses and three IPv6 addresses can be specified per location.</p> <p>If the TE DB is unable find a node in its topology database that matches a primary address of the location, it tries to find a node matching a secondary address. If this attempt also fails, the TE DB tries to find a node matching a tertiary address.</p> <p>The IP addresses specified for a location should be topologically “close” to a set of clients that should all receive the same optimal path for that location.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[location-id] *number*

Synopsis Optimal route reflection location ID

Context **configure** [router](#) *named-item-64* [bgp](#) [optimal-route-reflection](#) [location](#) *number*

Tree [location](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

primary-ip-address *ipv4-unicast-address*

Synopsis Primary IPv4 address of the reference location for ORR

Context **configure** [router](#) *named-item-64* [bgp](#) [optimal-route-reflection](#) [location](#) *number* [primary-ip-address](#) *ipv4-unicast-address*

Tree [primary-ip-address](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

primary-ipv6-address *ipv6-unicast-address*

Synopsis Primary IPv6 address of the reference location for ORR

Context **configure** [router](#) *named-item-64* [bgp](#) [optimal-route-reflection](#) [location](#) *number* [primary-ipv6-address](#) *ipv6-unicast-address*

Tree [primary-ipv6-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

secondary-ip-address *ipv4-unicast-address*

Synopsis Secondary IPv4 address of reference location for ORR

Context	configure router <i>named-item-64</i> bgp optimal-route-reflection location <i>number</i> secondary-ip-address <i>ipv4-unicast-address</i>
Tree	secondary-ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary-ipv6-address *ipv6-unicast-address*

Synopsis	Secondary IPv6 address of reference location for ORR
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection location <i>number</i> secondary-ipv6-address <i>ipv6-unicast-address</i>
Tree	secondary-ipv6-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tertiary-ip-address *ipv4-unicast-address*

Synopsis	Tertiary IPv4 address of the reference location for ORR
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection location <i>number</i> tertiary-ip-address <i>ipv4-unicast-address</i>
Tree	tertiary-ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tertiary-ipv6-address *ipv6-unicast-address*

Synopsis	Tertiary IPv6 address of the reference location for ORR
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection location <i>number</i> tertiary-ipv6-address <i>ipv6-unicast-address</i>
Tree	tertiary-ipv6-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection spf-wait
Tree	spf-wait
Description	Commands in this context specify the interval between consecutive SPF calculations performed by the TE DB in support of BGP optimal route reflection. The time components implement an exponential back-off algorithm. .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection spf-wait initial-wait <i>number</i>
Tree	initial-wait
Range	1 to 300
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	configure router <i>named-item-64</i> bgp optimal-route-reflection spf-wait max-wait <i>number</i>
Tree	max-wait
Range	1 to 600
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

second-wait *number*

Synopsis	Delay between first and second SPF calculation
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Context	configure router <i>named-item-64</i> bgp optimal-route-reflection spf-wait second-wait <i>number</i>
Tree	second-wait
Range	1 to 300
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound-route-filtering

Synopsis	Enable the outbound-route-filtering context
Context	configure router <i>named-item-64</i> bgp outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When unconfigured, the ORF capabilities are not enabled.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-community

Synopsis	Enable the extended-community context
Context	configure router <i>named-item-64</i> bgp outbound-route-filtering extended-community
Tree	extended-community
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities. When this context is unconfigured, the ORF capabilities for Extended Communities is not enabled.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure router <i>named-item-64</i> bgp outbound-route-filtering extended-community accept-orf <i>boolean</i>

Tree	accept-orf
Description	<p>When configured to true, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When configured to false, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-orf

Synopsis	Enable the send-orf context
Context	configure router <i>named-item-64</i> bgp outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, ORF send capability is not enabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target [[community-name](#)] *named-item*

Synopsis	Add a list entry for route-target
Context	configure router <i>named-item-64</i> bgp outbound-route-filtering extended-community send-orf route-target <i>named-item</i>
Tree	route-target
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[community-name](#)] *named-item*

Synopsis	Route target community name
Context	configure router <i>named-item-64</i> bgp outbound-route-filtering extended-community send-orf route-target <i>named-item</i>

Tree	route-target
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-tunnel-elc *boolean*

Synopsis	Enable entropy label capability on BGP tunnels
Context	configure router <i>named-item-64</i> bgp override-tunnel-elc <i>boolean</i>
Tree	override-tunnel-elc
Description	<p>When configured to true, this command renders all far ends for BGP tunnels as entropy-label-capable, regardless of any received capability signaling. This ensures that the entropy label will be inserted on BGP tunnels in the absence of capability signaling support by the far end.</p> <p>This is a system-wide configuration, since efficient entropy label operation requires that all LSRs in a network support entropy labels. This command should be used with care, particularly in inter-AS use cases, as entropy label capability may differ between domains.</p> <p>When configured to false, this command disables all far ends for BGP tunnels as entropy-label-capable.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure router <i>named-item-64</i> bgp path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is activated toward an IPv4 BGP neighbor. The Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, the device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value to accommodate the IP MTU constraint.</p>

When configured to **false**, PMTUD is disabled and there is no TCP MSS configuration to associate with a BGP neighbor (in either the BGP configuration or the first-hop IP interface configuration). The router advertises a TCP MSS option of only 1024 bytes, limiting the received TCP segments to that size.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure router <i>named-item-64</i> bgp peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-tracking-policy *reference*

Synopsis	Policy for BGP peer tracking on router instance
Context	configure router <i>named-item-64</i> bgp peer-tracking-policy <i>reference</i>
Tree	peer-tracking-policy
Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure router <i>named-item-64</i> bgp preference <i>number</i>

Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p>
Range	1 to 255
Default	170
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

purge-timer *number*

Synopsis	Maximum time before stale routes are purged
Context	configure router <i>named-item-64</i> bgp purge-timer <i>number</i>
Tree	purge-timer
Description	<p>This command configures the maximum time before stale routes are purged.</p> <p>When a route refresh request is sent to a peer for VPN-IP routes received from that peer (in the RIB-IN), the routes are set to stale and the purge timer is started. If the routes are not updated (refreshed) before the purge timer expires, the routes are removed.</p>
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rapid-update

Synopsis	Enter the rapid-update context
Context	configure router <i>named-item-64</i> bgp rapid-update
Tree	rapid-update
Description	<p>Commands in this context specify the address families that are configured to support the rapid update functionality.</p> <p>The rapid update functionality overrides the remaining time on a peer's MRAI timer and immediately sends routes belonging the specified address families (and all other pending updates) to the peers receiving these routes.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn boolean

Synopsis	Include EVPN address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Include IPv4 address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Include IPv6 address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

l2-vpn boolean

Synopsis	Include L2 VPN address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis Include labeled IPv4 address family routes

Context **configure** [router](#) *named-item-64* [bgp](#) [rapid-update](#) **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis Include labeled IPv6 address family routes

Context **configure** [router](#) *named-item-64* [bgp](#) [rapid-update](#) **label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mcast-vpn-ipv4 *boolean*

Synopsis Include multicast VPN IPv4 address family routes

Context **configure** [router](#) *named-item-64* [bgp](#) [rapid-update](#) **mcast-vpn-ipv4** *boolean*

Tree [mcast-vpn-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mcast-vpn-ipv6 *boolean*

Synopsis Include multicast VPN IPv6 address family routes

Context **configure** [router](#) *named-item-64* [bgp](#) [rapid-update](#) **mcast-vpn-ipv6** *boolean*

Tree [mcast-vpn-ipv6](#)

Default false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mdt-safi *boolean*

Synopsis	Include MDT SAFI address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update mdt-safi <i>boolean</i>
Tree	mdt-safi
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv4 *boolean*

Synopsis	Include VPN IPv4 address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-ipv6 *boolean*

Synopsis	Include VPN IPv6 address family routes
Context	configure router <i>named-item-64</i> bgp rapid-update vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rapid-withdrawal *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	configure router <i>named-item-64</i> bgp rapid-withdrawal <i>boolean</i>
Tree	rapid-withdrawal

Description	When configured to true , UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger. When configured to false , withdrawal processing continues with the normal behavior.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-private

Synopsis	Enable the remove-private context
Context	configure router <i>named-item-64</i> bgp remove-private
Tree	remove-private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>named-item-64</i> bgp remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>named-item-64</i> bgp remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	configure router <i>named-item-64</i> bgp remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-management

Synopsis	Enter the rib-management context
Context	configure router <i>named-item-64</i> bgp rib-management
Tree	rib-management
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> bgp rib-management ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure router <i>named-item-64</i> bgp rib-management ipv4 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure router <i>named-item-64</i> bgp rib-management ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies one or more leak import policies.</p> <p>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>named-item-64</i> bgp rib-management ipv4 route-table-import
Tree	route-table-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>named-item-64</i> bgp rib-management ipv4 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.

When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>named-item-64</i> bgp rib-management ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure router <i>named-item-64</i> bgp rib-management ipv6 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv6 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
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Context	configure router <i>named-item-64</i> bgp rib-management ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies one or more leak import policies.</p> <p>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>named-item-64</i> bgp rib-management ipv6 route-table-import
Tree	route-table-import
Description	<p>This command enables the context to specify the name of a route to control the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>If this command is configured, then routes dropped or rejected by the configured policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by this command then the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of this command's policy.</p> <p>Route modifications specified in the actions of this command's policy are ignored and have no effect on the imported routes.</p> <p>If this command is not configured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name reference

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>named-item-64</i> bgp rib-management ipv6 route-table-import policy-name reference
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>named-item-64</i> bgp rib-management label-ipv4
Tree	label-ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure router <i>named-item-64</i> bgp rib-management label-ipv4 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the labeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and

destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis Leak import policy name

Context **configure** *router* *named-item-64* *bgp* *rib-management* *label-ipv4* *leak-import* *policy* (*policy-expr-string* | *string*)

Tree *policy*

Description This command specifies one or more leak import policies.
Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

String length 1 to 255

String format 'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])

Max. instances 15

Notes This element is ordered by the user.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

route-table-import

Synopsis Enter the **route-table-import** context

Context **configure** *router* *named-item-64* *bgp* *rib-management* *label-ipv4* *route-table-import*

Tree *route-table-import*

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis Name of policy that controls route importation into RIB

Context **configure** *router* *named-item-64* *bgp* *rib-management* *label-ipv4* *route-table-import* *policy-name* *reference*

Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>named-item-64</i> bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>named-item-64</i> bgp rib-management label-ipv6 route-table-import
Tree	route-table-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
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Context	configure router <i>named-item-64</i> bgp rib-management label-ipv6 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-install *boolean*

Synopsis	Install all IPv4 and IPv6 BGP routes in FIB and RTM
Context	configure router <i>named-item-64</i> bgp route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target-list [[community-name](#)] *named-item*

Synopsis	Add a list entry for route-target-list
Context	configure router <i>named-item-64</i> bgp route-target-list <i>named-item</i>
Tree	route-target-list
Description	<p>This command specifies a route target to be accepted from or advertised to peers.</p> <p>This command is only applicable if the router is a route-reflector server.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[community-name] *named-item*

Synopsis Route target community name

Context **configure** **router** *named-item-64* **bgp** **route-target-list** *named-item*

Tree **route-target-list**

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-id *ipv4-address*

Synopsis Router ID for the BGP instance in the AS

Context **configure** **router** *named-item-64* **bgp** **router-id** *ipv4-address*

Tree **router-id**

Description This command specifies the router ID to be used with the BGP instance.

Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.

When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rr-vpn-forwarding *boolean*

Synopsis Allow route reflector to forward VPN-IP routes

Context **configure** **router** *named-item-64* **bgp** **rr-vpn-forwarding** *boolean*

Tree **rr-vpn-forwarding**

Description When configured to **true**, the route reflector resolves VPN-IPv4 and VPN-IPv6 routes, sets itself as the next hop, and generates new labels for all the resolved routes.

During this process, all received VPN-IP routes, regardless of route target, are imported into the dummy VRF, where the BGP next hops are resolved. The routes are resolved to next-hop-self, and BGP allocates new VPRN service-label values for the routes, which are then advertised to peers.

The **transport-tunnel** command under the **configure router bgp next-hop-resolution labeled-routes** context determines what types of tunnels are eligible to resolve the next hops. If a received VPN-IP route from IBGP peer X is resolved and selected as the best path so that it can be re-advertised to an IBGP peer Y, and the BGP next-hop is modified toward peer Y (by using the **next-hop-self** command in Y's group or neighbor context or by using a next-hop action in an export policy applied to Y), BGP allocates a new VPRN service label value for the route, signals that new label value to Y, and programs the IOM to do the corresponding label swap operation. The supported combinations of X and Y are outlined below:

- from X (client) to Y (client)
- from X (client) to Y (non-client)
- from X (non-client) to Y (client)

When configured to **false**, the routes are re-advertised without signaling new VPRN labels, even if the BGP next hop is changed.

Nokia recommends setting this command to **false** for scaling and convergence reasons.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>named-item-64</i> bgp segment-routing
Tree	segment-routing
Description	Commands in this context configure options related to BGP segment routing (including prefix SID support).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>named-item-64</i> bgp segment-routing admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure router <i>named-item-64</i> bgp segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	Allow label allocation from entire SRBG space
Context	configure router <i>named-item-64</i> bgp segment-routing prefix-sid-range global
Tree	global
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-index *number*



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

Synopsis	Last label value available in contiguous range
Context	configure router <i>named-item-64</i> bgp segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 1048575
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-label *number***WARNING:**

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

Synopsis	First label value available in a contiguous range
Context	configure router <i>named-item-64</i> bgp segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 1048575
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selective-label-ip *keyword*

Synopsis	Label IP routes installed for local use on NHS router
Context	configure router <i>named-item-64</i> bgp selective-label-ip <i>keyword</i>
Tree	selective-label-ip
Description	<p>This command enables selective installation of labeled unicast routes for resolution by local services and IP shortcuts on a labeled unicast Next-hop=self router.</p> <p>This command is supported for labeled unicast for both IPv4 and IPv6 routes.</p> <p>The no-install option installs labeled IP routes that are required by services. This option conserves labeled route table space in addition to RTM table space on BGP-LU next-hop-self route reflectors. The route-table-install-only option ensures that the labeled unicast routes are installed in the RTM in full. When no-install is specified, the download of labeled unicast routes for NHLFE resolution by services continues.</p>
Options	no-install, route-table-install-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selective-label-ip-prioritization *boolean*

Synopsis	Enable BGP selective prioritization for labeled routes
Context	configure router <i>named-item-64</i> bgp selective-label-ip-prioritization <i>boolean</i>

Tree	selective-label-ip-prioritization
Description	<p>When this command is set to true, every labeled IPv4 and IPv6 route that is received and potentially usable by a local service is automatically prioritized for fast control plane reconvergence. When the reachability of a BGP next-hop changes, the labeled IPv4 and IPv6 routes are updated into the route table first, along with other routes manually tagged as high priority by import policies. A /32 or /128 labeled unicast route (and associated BGP-LU tunnel) is determined to be potentially usable by a local service if one of the following conditions applies:</p> <ul style="list-style-type: none"> the route matches the far-end address of a user-provisioned SDP of a Layer 2 service and the SDP is configured to use BGP tunnels as transport the route matches the BGP next-hop address of a BGP-EVPN or IP VPN route, and this VPN route is either imported into a local service or readvertised by the router acting as a next-hop-self route reflector or a model-B ASBR <p>When this command is set to false, selective-label IP prioritization for BGP is not used.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	configure router <i>named-item-64</i> bgp selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-communities

Synopsis	Enter the send-communities context
Context	configure router <i>named-item-64</i> bgp send-communities
Tree	send-communities
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
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Context	configure router <i>named-item-64</i> bgp send-communities extended <i>boolean</i>
Tree	extended
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure router <i>named-item-64</i> bgp send-communities large <i>boolean</i>
Tree	large
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure router <i>named-item-64</i> bgp send-communities standard <i>boolean</i>
Tree	standard
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-default

Synopsis	Enter the send-default context
Context	configure router <i>named-item-64</i> bgp send-default
Tree	send-default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policy name
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Context	configure router <i>named-item-64</i> bgp send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure router <i>named-item-64</i> bgp send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure router <i>named-item-64</i> bgp send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>named-item-64</i> bgp split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to false, the use of split-horizon is disabled.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy-import *boolean*

Synopsis	Import all segment routing policies into the BGP RIB
Context	configure router <i>named-item-64</i> bgp sr-policy-import <i>boolean</i>
Tree	sr-policy-import
Description	<p>When configured to true, statically-configured non-local segment routing policies from the segment routing database are imported into the BGP RIB so that they can be advertised as originated routes toward BGP peers supporting segment routing policies (sr-policy-ipv4 IP family type).</p> <p>When configured to false, the SR policies are not imported into the BGP RIB.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subconfed-vpn-forwarding *boolean*

Synopsis	Allow subconfed route resolution, next hop and labels
Context	configure router <i>named-item-64</i> bgp subconfed-vpn-forwarding <i>boolean</i>
Tree	subconfed-vpn-forwarding
Description	<p>When this is set to true, the base router BGP instance retains all received VPN-IPv4 and VPN-IPv6 routes, including those with route targets not matching any VRF import policy of any locally configured VPRN. In addition, when the base router BGP is configured to apply a next-hop-self command to a peer of any type (EBGP, IBGP, or confed-EBGP), VPN-IPv4 and VPN-IPv6 routes are advertised to the peer with a new BGP label, next hop, and label-swap forwarding entry.</p> <p>These behaviors described above are applied when the enable-inter-as-vpn or enable-rr-vpn-forwarding commands are enabled in the configure router bgp context, in the same BGP instance. This applies regardless of whether the base router has a confederation configuration.</p> <p>When this command is set to false, subconfederation VPN forwarding is not used.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size override
Context	configure router <i>named-item-64</i> bgp tcp-mss <i>number</i>
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure router <i>named-item-64</i> bgp third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
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Context	configure router <i>named-item-64</i> bgp vpn-apply-export <i>boolean</i>
Tree	vpn-apply-export
Description	When configured to true , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to false , the export policies are not applied.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-apply-import *boolean*

Synopsis	Apply base-instance import route policies to VPN routes
Context	configure router <i>named-item-64</i> bgp vpn-apply-import <i>boolean</i>
Tree	vpn-apply-import
Description	When configured to true , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to false , the import policies are not applied.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confederation

Synopsis	Enter the confederation context
Context	configure router <i>named-item-64</i> confederation
Tree	confederation
Description	Commands in this context configure members that are to be part of a confederation. Creating confederation autonomous systems within as AS can be used to reduce the number of IBGP sessions required within an AS.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confed-as-num *number*

Synopsis	Confederation AS number
Context	configure router <i>named-item-64</i> confederation confed-as-num <i>number</i>

Tree	confed-as-num
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

members [[as-number](#)] *number*

Synopsis	Add a list entry for members
Context	configure router <i>named-item-64</i> confederation members <i>number</i>
Tree	members
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[as-number] *number*

Synopsis	Confederation member AS number
Context	configure router <i>named-item-64</i> confederation members <i>number</i>
Tree	members
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure router <i>named-item-64</i> dhcp-server
Tree	dhcp-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv4 [[name](#)] *named-item*

Synopsis	Enter the dhcpv4 list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i>
Tree	dhcpv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[name](#)] *named-item*

Synopsis	DHCP server name
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i>
Tree	dhcpv4
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [router](#) *named-item-64* [dhcp-server](#) [dhcpv4](#) *named-item* [description](#)

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

failover

Synopsis Enter the **failover** context

Context **configure** [router](#) *named-item-64* [dhcp-server](#) [dhcpv4](#) *named-item* [failover](#)

Tree [failover](#)

Description Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the failover mechanism

Context **configure** [router](#) *named-item-64* [dhcp-server](#) [dhcpv4](#) *named-item* [failover](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number***WARNING:**

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

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number***WARNING:**

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

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>failover partner-down-delay</i> <i>number</i>
Tree	<i>partner-down-delay</i>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [*address*] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>failover peer</i> <i>reference</i>
Tree	<i>peer</i>
Description	<p>Commands in this context define the peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p>

The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*



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

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number***WARNING:**

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

Synopsis	Time between initialization and assuming active role
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>failover startup-wait-time</i> <i>number</i>
Tree	<i>startup-wait-time</i>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>force-renews</i> <i>boolean</i>
Tree	<i>force-renews</i>
Description	When configured to true , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-hold

Synopsis	Enter the lease-hold context
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>lease-hold</i>
Tree	<i>lease-hold</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fwa-address-assignment *boolean*

Synopsis	Apply lease hold timer to FWA session
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios fwa-address-assignment <i>boolean</i>
Tree	fwa-address-assignment
Description	When configured to true , the router applies the lease hold timer to non-deferred IP addresses or SLAAC prefixes assigned to FWA sessions.
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
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Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>lease-hold additional-scenarios solicited-release</i> <i>boolean</i>
Tree	<i>solicited-release</i>
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Lease hold time
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>lease-hold time</i> <i>number</i>
Tree	<i>time</i>
Range	1 to 631152000
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [*pool-name*] *named-item*

Synopsis	Enter the pool list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i>
Tree	<i>pool</i>
Description	Commands in this context configure a DHCP address pool on the router.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool-name] *named-item*

Synopsis	DHCP server pool name
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i>
Tree	<i>pool</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover

Synopsis	Enter the failover context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>failover</i> ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*



WARNING:

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

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>failover</i> maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*

**WARNING:**

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

Synopsis	Delay to prevent lease duplication during link failure
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [*address*] *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Description	<p>Commands in this context configure peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p>

The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] reference

Synopsis	IP address of the failover peer
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*



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

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number***WARNING:**

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

Synopsis	Time between initialization and assuming active role
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lease-time *number*

Synopsis	Maximum lease time
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> max-lease-time <i>number</i>
Tree	max-lease-time
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-lease-time *number*

Synopsis	Minimum lease time
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> min-lease-time <i>number</i>
Tree	min-lease-time

Range	10 to 315446399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-free

Synopsis	Enter the minimum-free context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> minimum-free absolute <i>number</i>
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.

When configured to **false**, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>minimum-free</i> <i>percent</i> <i>number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nak-non-matching-subnet *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>nak-non-matching-subnet</i> <i>boolean</i>
Tree	<i>nak-non-matching-subnet</i>
Description	When configured to true , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to false or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

offer-time *number*

Synopsis	Time interval during which a DHCP offer remains valid
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Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> offer-time <i>number</i>
Tree	offer-time
Range	10 to 600
Units	seconds
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options
Tree	options
Description	Commands in this context define DHCPv4 pool options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [**number**] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Description	This command configures DHCP options at the pool level. The pool options can be overruled by the value of the same option in the local user database.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**number**] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option

Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time duration
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Remove DHCP option from configuration
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Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address *ipv4-address*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>ipv4-address</i>
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subnet [**ipv4-prefix**] *ipv4-unicast-prefix*

Synopsis	Enter the subnet list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i>
Tree	subnet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-prefix] *ipv4-unicast-prefix*

Synopsis	IPv4 prefix for the subnet
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i>
Tree	subnet
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-range [**start**] *ipv4-unicast-address* **end** *ipv4-unicast-address*

Synopsis	Enter the address-range list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>

Tree	address-range
Description	This command configures the range of IP addresses to be served from the pool subnet. The range includes all the IP addresses between the specified start and end addresses, other than specifically excluded addresses. The start and end addresses must be unique within the subnet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[start] *ipv4-unicast-address*

Synopsis	Lower bound of the IP address range
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	address-range
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv4-unicast-address*

Synopsis	Upper bound of the IP address range
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	address-range
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover-control-type *keyword***WARNING:**

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

Synopsis	Failover control type for this range
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i> failover-control-type <i>keyword</i>
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> drain <i>boolean</i>
Tree	drain
Description	When configured to true , new leases cannot be assigned and existing leases are kept up until they are released. When configured to false , the subnet is active and new leases can be assigned.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-addresses [*start*] *ipv4-unicast-address* **end** *ipv4-unicast-address*

Synopsis	Add a list entry for exclude-addresses
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> exclude-addresses <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	exclude-addresses
Description	This command configures an IP address to be excluded from the pool of IP addresses in the subnet.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[start] *ipv4-unicast-address*

Synopsis Lower bound of the IP address range

Context **configure** **router** *named-item-64* **dhcp-server** **dhcpv4** *named-item* **pool** *named-item* **subnet** *ipv4-unicast-prefix* **exclude-addresses** *ipv4-unicast-address* **end** *ipv4-unicast-address*

Tree **exclude-addresses**

Description This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

end *ipv4-unicast-address*

Synopsis Upper bound of the IP address range

Context **configure** **router** *named-item-64* **dhcp-server** **dhcpv4** *named-item* **pool** *named-item* **subnet** *ipv4-unicast-prefix* **exclude-addresses** *ipv4-unicast-address* **end** *ipv4-unicast-address*

Tree **exclude-addresses**

Description This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

maximum-declined *number*

Synopsis Maximum number of declined addresses allowed

Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>subnet</i> <i>ipv4-unicast-prefix</i> <i>maximum-declined</i> <i>number</i>
Tree	<i>maximum-declined</i>
Max. range	0 to 4294967295
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-free

Synopsis	Enter the minimum-free context
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>subnet</i> <i>ipv4-unicast-prefix</i> <i>minimum-free</i>
Tree	<i>minimum-free</i>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>subnet</i> <i>ipv4-unicast-prefix</i> <i>minimum-free</i> <i>absolute</i> <i>number</i>
Tree	<i>absolute</i>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>subnet</i> <i>ipv4-unicast-prefix</i> <i>minimum-free</i> <i>event-when-depleted</i> <i>boolean</i>
Tree	<i>event-when-depleted</i>

Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>)
Tree	option

Description	This command configures DHCP options at the pool subnet level. The options can be overruled by the value of the same option in the local user database.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>

Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address *ipv4-address*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>ipv4-address</i>

Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-selection

Synopsis	Enter the pool-selection context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection
Tree	pool-selection
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-gi-address

Synopsis	Enable the use-gi-address context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection use-gi-address
Tree	use-gi-address

Description	<p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope *keyword*

Synopsis	GI address-matching scope
Context	configure router named-item-64 dhcp-server dhcpv4 named-item pool-selection use-gi-address scope <i>keyword</i>
Tree	scope
Options	subnet, pool
Default	subnet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure router named-item-64 dhcp-server dhcpv4 named-item pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delimiter *string-not-all-spaces*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure router named-item-64 dhcp-server dhcpv4 named-item pool-selection use-pool-from-client delimiter <i>string-not-all-spaces</i>
Tree	delimiter

Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String length	1
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-db *reference*

Synopsis	Local user database for authentication
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-identification *keyword*



WARNING:

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

Synopsis	User identification method for the DHCP server
Context	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i> user-identification <i>keyword</i>
Tree	user-identification
Options	mac-circuit-id, client-id, mac, circuit-id, remote-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv6 [*name*] *named-item*

Synopsis	Enter the dhcpv6 list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i>
Tree	dhcpv6

Description	Commands in this context configure DHCPv6 parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	DHCP server name
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i>
Tree	dhcpv6
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-provisioned *boolean*



WARNING:

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

Synopsis	Auto-provision the pools of this server
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> auto-provisioned <i>boolean</i>
Tree	auto-provisioned
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

defaults

Synopsis	Enter the defaults context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults
Tree	defaults
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option
Description	This command configures DHCP options at the pool level. The pool options defined here can be overruled by the value of the same option in the local user database.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[number](#)] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option

Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String length	1 to 127
String format	'domain-string' must be a DNS-style label sequence (RFC 1035)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time
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Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	DHCP option specified as a list of IPv6 addresses
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Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>defaults</i> <i>options</i> <i>option</i> (<i>number</i> <i>keyword</i>) <i>ipv6-address</i> <i>ipv6-address</i>
Tree	<i>ipv6-address</i>
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>defaults</i> <i>preferred-lifetime</i> <i>number</i>
Tree	<i>preferred-lifetime</i>
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>defaults</i> <i>rebind-time</i> <i>number</i>

Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

renew-time *number*

Synopsis	Renew time for the lease
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults renew-time <i>number</i>
Tree	renew-time
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds

Default	1800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> defaults valid-lifetime <i>number</i>
Tree	valid-lifetime
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover

Synopsis	Enter the failover context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> failover
Tree	failover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*



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

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*



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

Synopsis	Delay to prevent lease duplication during link failure
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds

Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [address] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>failover peer</i> <i>reference</i>
Tree	<i>peer</i>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>failover peer</i> <i>reference</i>
Tree	<i>peer</i>
Reference	configure <i>redundancy multi-chassis peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*

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

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>failover peer</i> <i>reference</i> <i>sync-tag</i> <i>named-item</i>
Tree	<i>sync-tag</i>

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number*



WARNING:

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

Synopsis	Time between initialization and assuming active role
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> ignore-rapid-commit <i>boolean</i>
Tree	ignore-rapid-commit
Description	When configured to true , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-id-mapping *boolean*

**WARNING:**

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

Synopsis	Map hosts within interface-to-prefix combinations
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> interface-id-mapping <i>boolean</i>
Tree	interface-id-mapping
Description	When configured to true , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-hold

Synopsis	Enter the lease-hold context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold
Tree	lease-hold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fwa-address-assignment *boolean*

Synopsis Apply lease hold timer to FWA session

Context **configure** [router](#) *named-item-64* [dhcp-server dhcpv6](#) *named-item* [lease-hold additional-scenarios fwa-address-assignment](#) *boolean*

Tree [fwa-address-assignment](#)

Description When configured to **true**, the router applies the lease hold timer to non-deferred IP addresses or SLAAC prefixes assigned to FWA sessions.

Default false

Introduced 26.7.R1

Platforms 7705 SAR Gen 2

internal-lease-ipsec *boolean*

Synopsis Apply the lease hold timer to local IPsec clients

Context **configure** [router](#) *named-item-64* [dhcp-server dhcpv6](#) *named-item* [lease-hold additional-scenarios internal-lease-ipsec](#) *boolean*

Tree [internal-lease-ipsec](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

solicited-release *boolean*

Synopsis Apply lease hold timer for solicited releases

Context **configure** [router](#) *named-item-64* [dhcp-server dhcpv6](#) *named-item* [lease-hold additional-scenarios solicited-release](#) *boolean*

Tree [solicited-release](#)

Description This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis	Lease hold time
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold time <i>number</i>
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> lease-query <i>boolean</i>
Tree	lease-query
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [*pool-name*] *named-item*

Synopsis	Enter the pool list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i>
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool-name] *named-item*

Synopsis	DHCP server pool name
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delegated-prefix

Synopsis	Enter the delegated-prefix context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> delegated-prefix
Tree	delegated-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> delegated-prefix length <i>number</i>
Tree	length
Range	48 to 127
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum *number*

Synopsis	Maximum delegated prefix length for this pool
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> delegated-prefix maximum <i>number</i>
Tree	maximum
Range	48 to 127
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum *number*

Synopsis	Minimum delegated prefix length for this pool
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> delegated-prefix minimum <i>number</i>
Tree	minimum
Range	48 to 127
Default	48
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-prefix [[ipv6-prefix](#)] *ipv6-prefix*

Synopsis	Add a list entry for exclude-prefix
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> exclude-prefix <i>ipv6-prefix</i>
Tree	exclude-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> exclude-prefix <i>ipv6-prefix</i>

Tree	exclude-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover

Synopsis	Enter the failover context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover
Tree	failover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*

**WARNING:**

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

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*

**WARNING:**

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

Synopsis	Delay to prevent lease duplication during link failure
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough

time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.

Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [\[address\]](#) *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*



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

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number*



WARNING:

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

Synopsis	Time between initialization and assuming active role
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String length	1 to 127
String format	'domain-string' must be a DNS-style label sequence (RFC 1035)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [**ipv6-prefix**] *ipv6-prefix*

Synopsis	Enter the prefix list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drain *boolean*

Synopsis	No new leases can be assigned
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> drain <i>boolean</i>
Tree	drain
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover-control-type *keyword***WARNING:**

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

Synopsis	Failover control type for this range
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> failover-control-type <i>keyword</i>
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [**number**] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string

String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String length	1 to 127
String format	'domain-string' must be a DNS-style label sequence (RFC 1035)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
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Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> options option (<i>number</i> <i>keyword</i>) ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix</i> <i>ipv6-prefix</i> <i>preferred-lifetime</i> <i>number</i>
Tree	<i>preferred-lifetime</i>
Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length-threshold [*prefix-length*] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix</i> <i>ipv6-prefix</i> <i>prefix-length-threshold</i> <i>number</i>
Tree	<i>prefix-length-threshold</i>
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix</i> <i>ipv6-prefix</i> <i>prefix-length-threshold</i> <i>number</i>

Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absolute *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	configure router named-item-64 dhcp-server dhcpv6 named-item pool named-item prefix ipv6-prefix prefix-length-threshold number absolute <i>number</i>
Tree	absolute
Range	1 to 4294967295
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure router named-item-64 dhcp-server dhcpv6 named-item pool named-item prefix ipv6-prefix prefix-length-threshold number event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	configure router named-item-64 dhcp-server dhcpv6 named-item pool named-item prefix ipv6-prefix prefix-length-threshold number percent <i>number</i>
Tree	percent
Range	1 to 100
Notes	The following elements are part of a choice: absolute or percent .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-type

Synopsis	Enter the prefix-type context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> prefix-type
Tree	prefix-type
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pd boolean



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

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> prefix-type pd boolean
Tree	pd
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wan-host boolean



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

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> prefix-type wan-host boolean
Tree	wan-host
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> rebind-time <i>number</i>
Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

renew-time *number*

Synopsis	Renew time for the lease
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> renew-time <i>number</i>
Tree	renew-time
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The</p>

client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 604800
Units	seconds
Default	1800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

valid-lifetime *number*

Synopsis Time for the lease to remain valid

Context **configure** **router** *named-item-64* **dhcp-server** **dhcpv6** *named-item* **pool** *named-item* **prefix** *ipv6-prefix* **valid-lifetime** *number*

Tree **valid-lifetime**

Description This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.

Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Units	seconds
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length-threshold [*prefix-length*] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-free-percent *number*

Synopsis	Percentage of free prefixes for this prefix length
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Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix-length-threshold</i> <i>number</i> <i>minimum-free-percent</i> <i>number</i>
Tree	<i>minimum-free-percent</i>
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-selection

Synopsis	Enter the pool-selection context
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool-selection</i>
Tree	<i>pool-selection</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-link-address

Synopsis	Enable the use-link-address context
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool-selection</i> <i>use-link-address</i>
Tree	<i>use-link-address</i>
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope keyword

Synopsis	Scope of the IP address selection
Context	configure <i>router</i> <i>named-item-64</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool-selection</i> <i>use-link-address</i> <i>scope</i> <i>keyword</i>
Tree	<i>scope</i>
Options	subnet, pool
Default	subnet

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delimiter *string-not-all-spaces*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection use-pool-from-client delimiter <i>string-not-all-spaces</i>
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String length	1
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-id

Synopsis	Enter the server-id context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> server-id
Tree	server-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid-enterprise

Synopsis	Enter the duid-enterprise context
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-enterprise
Tree	duid-enterprise
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-enterprise ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 58
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DUID enterprise server ID specified as a hex string
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-enterprise hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 118
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid-link-local

Synopsis	Derive DUID server ID from a system link-layer address
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-link-local
Tree	duid-link-local
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-db *reference*

Synopsis	Assign local user database to lookup DHCP lease data
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> user-db <i>reference</i>
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-identification *keyword*



WARNING:

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

Synopsis	User identification method for the DHCP server
Context	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i> user-identification <i>keyword</i>
Tree	user-identification
Options	duid, interface-id, interface-id-link-local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns

Synopsis	Enter the dns context
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Context	configure router <i>named-item-64</i> dns
Tree	dns
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirect-vprn

Synopsis	Enter the redirect-vprn context
Context	configure router <i>named-item-64</i> dns redirect-vprn
Tree	redirect-vprn
Description	<p>Commands in this context configure DNS resolution of all packets through the VPRN DNS server.</p> <p>The VPRN DNS server must be configured before using the commands in this context. If the VPRN DNS server is not configured, all packet resolution fails.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service [[service-name](#)] *reference*

Synopsis	Enter the service list instance
Context	configure router <i>named-item-64</i> dns redirect-vprn service <i>reference</i>
Tree	service
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] *reference*

Synopsis	Administrative service name
Context	configure router <i>named-item-64</i> dns redirect-vprn service <i>reference</i>
Tree	service
Reference	configure service vprn <i>service-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Service preference
Context	configure router <i>named-item-64</i> dns redirect-vprn service <i>reference</i> preference <i>number</i>
Tree	preference
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	configure router <i>named-item-64</i> ecmp <i>number</i>
Tree	ecmp
Description	<p>This command configures ECMP and defines the number of routes for path sharing.</p> <p>ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria:</p> <ol style="list-style-type: none">1. The system selects the lowest next hop router ID.2. If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.
Range	1 to 128
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *boolean*

Synopsis	Use entropy label
Context	configure router <i>named-item-64</i> entropy-label <i>boolean</i>
Tree	entropy-label
Description	<p>When configured to true, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP</p>

or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the **configure router mpls** or **configure router mpls lsp** context.

This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, the use of entropy labels is disabled.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-neighbor-synchronization

Synopsis	Enable the evpn-neighbor-synchronization context
Context	configure router <i>named-item-64</i> evpn-neighbor-synchronization
Tree	evpn-neighbor-synchronization
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of EVPN synchronization
Context	configure router <i>named-item-64</i> evpn-neighbor-synchronization admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command configures local static and dynamic ARP and ND entries to be advertised using an EVPN MAC/IP advertisement route. On reception of those routes, ARP and ND entries are created on the routing context and interface identified by the EVI route target and the ESI.</p> <p>When unconfigured, local static and dynamic ARP and ND entries are not advertised.</p>
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

evi-route-target *evi-route-target***WARNING:**

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

Synopsis	EVI route target to use for EVPN neighbor synchronization
Context	configure router <i>named-item-64</i> evpn-neighbor-synchronization evi-route-target <i>evi-route-target</i>
Tree	evi-route-target
Description	This command configures the EVI route target used on the MAC/IP routes advertised for the routing context. On reception, the EVI route target is used to identify the routing context in which the ARP and ND entries are installed.
String length	10 to 28
String format	'evi-route-target-32' must be evi-target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Time that an EVPN ARP or ND entry is retained
Context	configure router <i>named-item-64</i> evpn-neighbor-synchronization retention-timer <i>number</i>
Tree	retention-timer
Description	<p>This command sets the timer that determines how long an EVPN ARP or ND entry is retained after the remote PE withdraws the MAC/IP route that originated it. The behavior for a synchronized ARP and ND entry is as follows:</p> <ol style="list-style-type: none"> 1. When the originating EVPN MAC/IP route is withdrawn, the retention timer starts, and the entry remains present until the timer expires. 2. While the retention timer is active, the system attempts to refresh the entry by sending an ARP Request or Neighbor Solicitation to the IP owner. This refresh may occur at any point from the start of the timer until 30 seconds before it expires. 3. ARP Requests and Neighbor Solicitations are staggered within the timeout period to prevent overloading the CPM transmitter when many entries require refreshing.
Range	1 to 65535
Units	seconds
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

route-distinguisher *vpn-route-distinguisher***WARNING:**

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

Synopsis	Route distinguisher used for synchronization
Context	configure router <i>named-item-64</i> evpn-neighbor-synchronization route-distinguisher <i>vpn-route-distinguisher</i>
Tree	route-distinguisher
Description	This command configures the route distinguisher of the MAC/IP routes used for synchronization.
String format	'vpn-route-distinguisher' must be IP:comm or AS-number pair per RD rules
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

route-tag *number***WARNING:**

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

Synopsis	BGP route tag for MAC/IP routes synchronization
Context	configure router <i>named-item-64</i> evpn-neighbor-synchronization route-tag <i>number</i>
Tree	route-tag
Description	This command applies the BGP route tag to MAC/IP routes generated from local ARP and ND entries. This tag can be matched by any export policy.
Range	1 to 255
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	configure router <i>named-item-64</i> fib-priority <i>keyword</i>
Tree	fib-priority
Description	This command prioritizes the order in which BGP FIB entries across different routing instances are pushed to the IOM for updating. This allows BGP route updates for higher

priority router instances to occur as quickly as possible by assigning a FIB priority to the associated router instances (base and VPRN instances).

If routing updates are available for multiple router instances, the IOMs or IMMJs update the FIB with entries with **high** priority router instances before entries with **standard** priority router instances.

Options	standard – Standard FIB priority for routing instances high – High FIB priority for routing instances
Default	standard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-tunneling *boolean*

Synopsis	Allow tunneling of ICMP reply packets over MPLS LSPs
Context	configure router <i>named-item-64</i> icmp-tunneling <i>boolean</i>
Tree	icmp-tunneling
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp

Synopsis	Enable the igmp context
Context	configure router <i>named-item-64</i> igmp
Tree	igmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>named-item-64</i> igmp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

group-if-query-source-address *ipv4-unicast-address*

Synopsis Default query-source address for all group interfaces

Context **configure** *router* *named-item-64* **igmp** **group-if-query-source-address** *ipv4-unicast-address*

Tree **group-if-query-source-address**

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface [*ip-interface-name*] *interface-name*

Synopsis Enter the **interface** list instance

Context **configure** *router* *named-item-64* **igmp** **interface** *interface-name*

Tree **interface**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-interface-name] *interface-name*

Synopsis IP interface name

Context **configure** *router* *named-item-64* **igmp** **interface** *interface-name*

Tree **interface**

Description This command configures the interface name, which must be unique within the group of defined IP interfaces for the context. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area, it is moved to this area.

An interface name cannot be in the form of an IP address.

String length 1 to 32

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
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Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> redundant-mcast <i>boolean</i>
Tree	redundant-mcast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range **start** *ipv4-multicast-address* **end** *ipv4-multicast-address*

Synopsis	Enter the group-range list instance
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv4-multicast-address*

Synopsis	Lower bound of the IP address group range
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv4-multicast-address*

Synopsis	Upper bound of the IP address group range
Context	configure <i>router</i> <i>named-item-64</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>ssm-translate</i> <i>group-range</i> start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	<i>group-range</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [*source-address*] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure <i>router</i> <i>named-item-64</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>ssm-translate</i> <i>group-range</i> start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	<i>source</i>
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure <i>router</i> <i>named-item-64</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>ssm-translate</i> <i>group-range</i> start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	<i>source</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure <i>router</i> <i>named-item-64</i> <i>igmp interface interface-name</i> static
Tree	static
Description	Commands in this context configure the testing of multicast forwarding on an interface without a receiver host.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [*group-address*] *ipv4-multicast-address*

Synopsis	Enter the group list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>igmp interface interface-name</i> static group <i>ipv4-multicast-address</i>
Tree	group
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. IGMP static group memberships are used to test multicast forwarding without a receiver host.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p> <p>When the group entries are configured on point-to-point links that connect routers to a rendezvous point (RP), the static IGMP group entries do not generate join messages toward the RP.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-address] *ipv4-multicast-address*

Synopsis	Group address of static IGMP multicast channel
Context	configure <i>router</i> <i>named-item-64</i> <i>igmp interface interface-name</i> static group <i>ipv4-multicast-address</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>

	'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> static group <i>ipv4-multicast-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

group-range *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* *step* *ipv4-address*

Synopsis Enter the **group-range** list instance

Context **configure** *router* *named-item-64* *igmp* *interface* *interface-name* *static* **group-range** *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* *step* *ipv4-address*

Tree *group-range*

Description Commands in this context configure the ranges of IP addresses for the static groups.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

start *ipv4-multicast-address*

Synopsis IP address for the start of the static group range

Context **configure** *router* *named-item-64* *igmp* *interface* *interface-name* *static* **group-range** *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* *step* *ipv4-address*

Tree *group-range*

String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end *ipv4-multicast-address*

Synopsis IP address for the end of the static group range

Context **configure** *router* *named-item-64* *igmp* *interface* *interface-name* *static* **group-range** *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* *step* *ipv4-address*

Tree *group-range*

String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

step *ipv4-address*

Synopsis Step interval in the group-range address

Context **configure** *router* *named-item-64* *igmp* *interface* *interface-name* *static* *group-range* *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* **step** *ipv4-address*

Tree *group-range*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

MD-CLI default 0.0.0.1

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

source [*source-address*] *ipv4-unicast-address*

Synopsis Add a list entry for **source**

Context **configure** *router* *named-item-64* *igmp* *interface* *interface-name* *static* *group-range* *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* **step** *ipv4-address* **source** *ipv4-unicast-address*

Tree *source*

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis Source IP address of multicast channel sending data

Context **configure** *router* *named-item-64* *igmp* *interface* *interface-name* *static* *group-range* *start* *ipv4-multicast-address* *end* *ipv4-multicast-address* **step** *ipv4-address* **source** *ipv4-unicast-address*

Tree *source*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> static group-range start ipv4-multicast-address end ipv4-multicast-address step ipv4-address starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	IGMP protocol version
Context	configure router <i>named-item-64</i> igmp interface <i>interface-name</i> version <i>keyword</i>
Tree	version
Options	1, 2, 3
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
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Context	configure router <i>named-item-64</i> igmp query-interval <i>number</i>
Tree	query-interval
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>named-item-64</i> igmp query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>named-item-64</i> igmp query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure router <i>named-item-64</i> igmp robust-count <i>number</i>
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, this value can be increased.
Range	2 to 10
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>named-item-64</i> igmp ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv4-multicast-address* [end](#) *ipv4-multicast-address*

Synopsis	Enter the group-range list instance
Context	configure router <i>named-item-64</i> igmp ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start ipv4-multicast-address

Synopsis	Lower bound of the IP address group range
Context	configure router <i>named-item-64</i> igmp ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end ipv4-multicast-address

Synopsis	Upper bound of the IP address group range
Context	configure router <i>named-item-64</i> igmp ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [**source-address**] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure router <i>named-item-64</i> igmp ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>named-item-64</i> igmp ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [interface-name] *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i>
Tree	interface
Description	Commands in this context create a logical IP routing or unnumbered MPLS-TP interface. An IP address, port, or system can then be associated with the IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i>
Tree	interface
Description	<p>This command specifies the name of the router interface. When a user enters a new name, the system creates a new logical interface and the context changes to that interface for more command processing.</p> <p>When an existing interface name is entered, the user enters the router interface context for editing and configuration.</p> <p>Nokia recommends using names that are meaningful and unique to remove ambiguity when displaying the state associated with IP interfaces either via show commands or model-driven interfaces.</p> <p>See "Router configuration overview" in the <i>7705 SAR Gen 2 Router Configuration Guide</i> for more information about the interface name.</p>
String length	1 to 32

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

autoconfigure

Synopsis	Enter the autoconfigure context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure
Tree	autoconfigure
Description	Commands in this context configure the autoconfigure functionality for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4
Tree	ipv4
Description	Commands in this context configure IPv4 autoconfigure settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-client

Synopsis	Enable the dhcp-client context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client

Tree	dhcp-client
Description	Commands in this context configure the node as an IPv4 DHCP client. When the node operates as a DHCP client, it learns the IP address of the interface via dynamic IP address assignment.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP client
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-id



WARNING:

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

Synopsis	Enter the class-id context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id
Tree	class-id
Description	Commands in this context configure the vendor class ID for the DHCP client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string*



WARNING:

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

Synopsis	Vendor class ID as an ASCII string
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 127
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*



WARNING:

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

Synopsis	Vendor class ID as a hexadecimal string
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-id



WARNING:

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

Synopsis	Enter the client-id context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id
Tree	client-id
Description	Commands in this context configure the client ID for the DHCP client.
Introduced	25.3.R2

Platforms7705 SAR Gen 2

ascii-string string

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

Synopsis	Client ID as an ASCII string
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client <i>client-id</i> ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 127
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string hex-string

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

Synopsis	Client ID as a hexadecimal string
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client <i>client-id</i> hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface

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

Synopsis	Interface name as the client ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id interface
Tree	interface
Description	This command configures the node to use the interface name as the client ID.
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

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

Synopsis	MAC address as the client ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id mac
Tree	mac
Description	This command configures the node to use the MAC address as the client ID.
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-time (*number* | *keyword*)

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

Synopsis	Lease time the DHCP client requests
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client lease-time (<i>number</i> <i>keyword</i>)
Tree	lease-time
Description	This command configures the lease time that the DHCP client requests to the DHCP server. The DHCP server can override the configured value.
Range	10 to 315446399
Units	seconds
Options	infinite – Request an infinite lease with no expiry
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

request-options



WARNING:

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

Synopsis	Enter the request-options context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options
Tree	request-options
Description	Commands in this context configure the DHCP options to include in the parameter request list as part of the DHCPREQUEST message to the server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns-server *boolean*



WARNING:

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

Synopsis	Include the DNS server option
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options dns-server <i>boolean</i>
Tree	dns-server

Description	When configured to true , the node includes the DNS server option (Option 54) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router *boolean*

**WARNING:**

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

Synopsis	Include the router option
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options router <i>boolean</i>
Tree	router
Description	When configured to true , the node includes the router option (Option 3) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-route *boolean*

**WARNING:**

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

Synopsis	Include the static route option
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options static-route <i>boolean</i>
Tree	static-route
Description	When configured to true , the node includes the static route option (Option 121) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection *reference*

Synopsis	DCP policy name for interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Description	<p>This command configures a Distributed CPU Protection (DCP) policy for the associated IP interface or SAP. The user can only assign a valid created DCP policy to a SAP or network interface (this rule does not apply to templates such as an MSAP policy).</p> <p>If the operator does not assign a DCP policy to a router interface, the system uses the default network DCP policy.</p>
Reference	configure system security dist-cpu-protection policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> egress
Tree	egress
Description	<p>Commands in this context configure egress network filter policies for the IP interface. The system does not filter unless an operator defines a filter.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> egress filter
Tree	filter
Description	Commands in this context configure the names of the egress IPv4 and IPv6 network filter policies for the interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> egress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm
Tree	eth-cfm
Description	Commands in this context configure the Ethernet CFM command options for the associated IP interface.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

mep *md-admin-name reference* *ma-admin-name reference* *mep-id number*

Synopsis Enter the **mep** list instance

Context **configure** *router named-item-64 interface interface-name eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*

Tree *mep*

Description Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.

Max. instances 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

md-admin-name *reference*

Synopsis Maintenance Domain (MD) name

Context **configure** *router named-item-64 interface interface-name eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*

Tree *mep*

Reference **configure** *eth-cfm domain admin-name*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ma-admin-name *reference*

Synopsis Maintenance Association (MA) name

Context **configure** *router named-item-64 interface interface-name eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*

Tree *mep*

Reference **configure** *eth-cfm domain admin-name association admin-name*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> ccm-tlv-ignore <i>keyword</i>
Tree	ccm-tlv-ignore
Description	<p>This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.</p> <p>When unconfigured, the MEP processes all the recognized TLVs.</p>
Options	interface-status, port-status
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number facility-fault <i>boolean</i>
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect for fault alarm generation
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Description	This command specifies the lowest priority defect that generates a fault alarm and also configures the fault state of the MEP that causes a network reaction.
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis	MAC address of the MEP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> mac-address <i>mac-unicast-address-no-zero</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> eth-cfm mep md-admin-name reference ma-admin-name reference mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds

Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flavor *keyword*



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

Synopsis	Network interface flavor
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>flavor</i> <i>keyword</i>
Tree	<i>flavor</i>
Options	<i>regular</i> – Regular network interface <i>pdn</i> – PDN interface <i>unnumbered-mpls-tp</i> – Unnumbered MPLS-TP interface
Default	<i>regular</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>hold-time</i>
Tree	<i>hold-time</i>
Description	Commands in this context configure the interface-level up and down hold timers for the associated IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>hold-time</i> <i>ipv4</i>
Tree	<i>ipv4</i>
Description	Commands in this context configure the interface-level IPv4 hold timers for the associated IP interface.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down

Synopsis	Enter the down context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

up

Synopsis Enter the **up** context

Context **configure** *router named-item-64* *interface interface-name* *hold-time* *ipv4* **up**

Tree **up**

Description Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

seconds *number*

Synopsis Up hold time for the IP interface

Context **configure** *router named-item-64* *interface interface-name* *hold-time* *ipv4* **up** *seconds number*

Tree **seconds**

Range 1 to 1200

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6

Synopsis Enter the **ipv6** context

Context **configure** *router named-item-64* *interface interface-name* *hold-time* *ipv6*

Tree **ipv6**

Description Commands in this context configure the interface-level IPv6 hold timers for the associated IP interface.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

down

Synopsis	Enter the down context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv6 down init-only <i>boolean</i>
Tree	init-only
Description	When configured to true , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv6 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up

Synopsis	Enter the up context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

if-attribute

Synopsis	Enter the if-attribute context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute
Tree	if-attribute
Description	Commands in this context configure attributes of the IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute admin-group <i>reference</i>

Tree	admin-group
Description	This command specifies the administrative group membership to an interface. The configured administrative group membership is applied in all levels or areas the interface is participating in. The same interface cannot have different memberships in different levels or areas.
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay

Synopsis	Enter the delay context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute delay
Tree	delay
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic

Synopsis	Enter the dynamic context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute delay dynamic
Tree	dynamic
Description	Commands in this context configure dynamic link delay measurement options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static *number*

Synopsis	Unidirectional link delay static information
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute delay static <i>number</i>
Tree	static
Description	This command configures the unidirectional link delay. By default there is no configured delay, and the link delay metric TLV is pruned in the IGP.

Range	1 to 16777214
Units	microseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg-group [*name*] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Description	<p>Commands in this context add a list entry for a Shared Risk Link Group (SRLG) that can be associated with an IP or MPLS interface to tag IP or MPLS interfaces that share a specific outcome with the same identifier. For example, an SRLG group identifier could represent all links that use separate fibers but are carried in the same fiber conduit.</p> <p>The name and identifier of each SRLG group must be configured locally on each router before the user configures the SRLG membership of an interface. A maximum of 1024 SRLGs can be configured per system. The user can apply SRLGs to an IES, VPRN, network IP, or MPLS interface. A maximum of 64 SRLGs can be applied to an interface.</p> <p>See "Shared Risk Link Groups" in the <i>7705 SAR Gen 2 MPLS Guide</i> for more information about SRLGs.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *reference*

Synopsis	SRLG name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ingress
Tree	ingress
Description	Commands in this context configure ingress network filter policies for the IP interface. If an ingress filter is not defined, the system performs no filtering.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ingress filter
Tree	filter
Description	Commands in this context associate an IP filter policy with an IP interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-mtu *number*

Synopsis	Interface IP MTU
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.</p> <p>The operational IP MTU used for the interface is based on the configured IP MTU and the port MTU of the port bound to this interface; that is, the operational MTU is set to the lesser of the values configured by this command and the port MTU value less the Ethernet header size.</p> <p>If the interface supports IPv6 packets, this command must be set to at least 1280, in accordance with RFC 2460 <i>Internet Protocol, Version 6 (IPv6) Specification</i>.</p>
Range	512 to 9786
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec

Synopsis	Enable the ipsec context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec
Tree	ipsec
Description	Commands in this context configure an IPsec secured interface.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-exception *reference*

Synopsis	IP exception filter
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ip-exception <i>reference</i>
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	configure filter ip-exception <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-tunnel [[name](#)] *named-item*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec tunnel name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'name' must not start with a number (e.g. tunnel-1)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd**WARNING:**

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

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-designate *boolean***WARNING:**

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

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-liveness

**WARNING:**

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

Synopsis	Enable the bfd-liveness context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dest-ip *ipv4-unicast-address*

**WARNING:**

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

Synopsis	Destination address used for the BFD session
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness dest-ip <i>ipv4-unicast-address</i>
Tree	dest-ip
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interface *interface-name***WARNING:**

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

Synopsis	Name of the interface used by the BFD session
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

service-name *service-name***WARNING:**

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

Synopsis	Administrative service name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness service-name <i>service-name</i>
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

clear-df-bit *boolean***WARNING:**

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

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

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

Synopsis	Enable traffic class copy upon decapsulation
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number*

**WARNING:**

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

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-generation

**WARNING:**

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

Synopsis	Enter the icmp-generation context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required

**WARNING:**

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

Synopsis	Enter the frag-required context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*



WARNING:

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

Synopsis	Administrative state of sending ICMP messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*



WARNING:

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

Synopsis	Interval for sending ICMP messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required interval <i>number</i>

Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

**WARNING:**

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

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation

**WARNING:**

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

Synopsis	Enter the icmp6-generation context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

packet-too-big



WARNING:

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

Synopsis	Enter the packet-too-big context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword



WARNING:

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

Synopsis	Administrative state of Packet Too Big message sends
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

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

Synopsis	Interval for sending Packet Too Big messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

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

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number*



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

Synopsis	Private MTU of the IPsec tunnel
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

key-exchange



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

Synopsis	Enter the key-exchange context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange
Tree	key-exchange
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic



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

Synopsis	Enable the dynamic context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic

Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish *boolean*



WARNING:

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

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Description	<p>When configured to true, the system automatically attempts to establish a phase 1 exchange.</p> <p>The system automatically establishes phase 1 SA as soon as the tunnel is provisioned and enabled. This command should only be configured on one side of the tunnel.</p> <p>Static routes that use the auto-establish tunnel as the next hop are brought down when the tunnel goes down.</p> <p>When configured to false, the system does not automatically attempt to establish a phase 1 exchange.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish-sustain *boolean*



WARNING:

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

Synopsis	Enable sustain mode for auto-establish tunnels
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish-sustain <i>boolean</i>
Tree	auto-establish-sustain

Description	<p>When configured to true, the tunnel initiator keeps the IKE_SA and CHILD_SA up to prevent phase 2 expiry when there is no traffic, and starts a new exchange to establish a replacement when the peer deletes the SA.</p> <p>When configured to false, the tunnel initiator does not prevent the SA from expiring and does not establish a replacement when the peer deletes the SA.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert

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

Synopsis	Enter the cert context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify

**WARNING:**

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

Synopsis	Enter the status-verify context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure router named-item-64 interface interface-name ipsec ipsec-tunnel named-item key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure router named-item-64 interface interface-name ipsec ipsec-tunnel named-item key-exchange dynamic cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile named-item
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id



WARNING:

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

Synopsis	Enter the id context
Context	configure router named-item-64 interface interface-name ipsec ipsec-tunnel named-item key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.

The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name*



WARNING:

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

Synopsis FQDN used as the local ID IKE type

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipsec** **ipsec-tunnel** *named-item* **key-exchange** **dynamic id** **fqdn** *fully-qualified-domain-name*

Tree **fqdn**

String length 1 to 255

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address*



WARNING:

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

Synopsis IPv4 as the local ID type

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipsec** **ipsec-tunnel** *named-item* **key-exchange** **dynamic id** **ipv4** *ipv4-unicast-address*

Tree **ipv4**

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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



WARNING:

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

Synopsis

IPv6 used as the local IKE ID type

Context

configure **router** *named-item-64* **interface** *interface-name* **ipsec ipsec-tunnel** *named-item* **key-exchange** **dynamic id** **ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree

ipv6

Notes

The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced

25.3.R2

Platforms

7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy *reference*



WARNING:

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

Synopsis

IKE policy ID

Context

configure **router** *named-item-64* **interface** *interface-name* **ipsec ipsec-tunnel** *named-item* **key-exchange** **dynamic** **ike-policy** *reference*

Tree

ike-policy

Description

This command specifies the ID of the IKE policy used for IKE negotiation.
The **ipsec-transport-mode-profile** configuration only supports IKEv2.

Reference

configure **ipsec** **ike-policy** *number*

Introduced

25.3.R2

Platforms

7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*



WARNING:

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

Synopsis

IPsec transform IDs used by the dynamic key

Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk



WARNING:

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

Synopsis	Enter the ppk context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk
Tree	ppk
Description	Commands in this context configure the PPKs to use for dynamic keying of the IPsec tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id reference



WARNING:

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

Synopsis	PPK ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk id <i>reference</i>
Tree	id
Reference	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

list reference

**WARNING:**

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

Synopsis	PPK list instance name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk list <i>reference</i>
Tree	list
Reference	configure ipsec ppk-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key encrypted-leaf

**WARNING:**

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

Synopsis	Pre-shared key for authentication
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic pre-shared-key <i>encrypted-leaf</i>
Tree	pre-shared-key
Description	This command specifies the pre-shared key for authentication in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reverse-route-injection

**WARNING:**

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

Synopsis	Enable the reverse-route-injection context
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Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipsec ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>dynamic</i> <i>reverse-route-injection</i>
Tree	<i>reverse-route-injection</i>
Description	Commands in this context configure reverse route injection for IPsec tunnels. When reverse route injection is enabled, the system injects routes into the service based on the final TSr. One route is created for each TS in the TSr, with the prefix length as the longest number that covers the address range in the TS. The system removes the reverse route when the corresponding CHILD_SA is removed.
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

metric *number*



WARNING:

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

Synopsis	Metric to use for reverse route injection
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipsec ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>dynamic</i> <i>reverse-route-injection</i> <i>metric</i> <i>number</i>
Tree	<i>metric</i>
Description	This command configures the metric for reverse routes installed by reverse route injection. The system uses the metric when selecting a route to install in the route table. If there are multiple reverse routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

preference *number*



WARNING:

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

Synopsis	Preference to use for reverse route injection
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipsec ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>dynamic</i> <i>reverse-route-injection</i> <i>preference</i> <i>number</i>

Tree	preference
Description	This command configures the route preference assigned to reverse routes installed by reverse route injection. The system uses this preference when selecting a route to install in the route table. The lower the preference value, the more the route is preferred by the system.
Range	0 to 255
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

manual



WARNING:

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

Synopsis	Enable the manual context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keys [[security-association](#)] *number* [direction](#) *keyword*

Synopsis	Enter the keys list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[security-association] *number*

Synopsis	SA entry ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

direction keyword

Synopsis	Direction of the IPsec tunnel
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-key hex-string**WARNING:**

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

Synopsis	Key used for the authentication algorithm
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>hex-string</i>
Tree	authentication-key
String length	1 to 130
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encryption-key *hex-string*

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

Synopsis	Key used for the encryption algorithm
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>hex-string</i>
Tree	encryption-key
String length	1 to 66
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*

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

Synopsis	Transform entry used by manual SAs
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> ipsec-transform <i>reference</i>
Tree	ipsec-transform
Reference	configure ipsec ipsec-transform <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

spi *number*

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

Synopsis	SPI of inbound and outbound packets
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Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i>
Tree	spi
Description	<p>This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.</p> <p>The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p>
Range	256 to 16383
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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



WARNING:

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

Synopsis	Local IPsec tunnel endpoint address
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> local-gateway-address-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records



WARNING:

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

Synopsis	Enter the max-history-key-records context
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records
Tree	max-history-key-records

Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp number

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

Synopsis	Maximum number of recent records
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike number

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

Synopsis	Maximum number of historical IKE key records
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pmtu-discovery-aging number

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

Synopsis	Aging out time of the learned path MTU
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-sap *number*



WARNING:

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



WARNING:

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

Synopsis	Private SAP ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> private-sap <i>number</i>
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-service *service-name*



WARNING:

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



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

Synopsis	Private service name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> private-service <i>service-name</i>
Tree	private-service
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number*



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

Synopsis	TCP maximum segment size (MSS) adjustment
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean*

**WARNING:**

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

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean*

**WARNING:**

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

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)

**WARNING:**

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

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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



WARNING:

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

Synopsis	Remote IPsec tunnel endpoint address
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> remote-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-gateway-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

replay-window *number*



WARNING:

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

Synopsis	Anti-replay window size
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.

Range	32 64 128 256 512
Units	packets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

security-policy

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

Synopsis	Enter the security-policy context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy
Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id number

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

Synopsis	Security policy ID for use by the tunnel
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy id <i>number</i>
Tree	id
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

strict-match *boolean***WARNING:**

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

Synopsis	Enable strict match of the security policy entry
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipsec ipv6-exception <i>reference</i>
Tree	ipv6-exception
Description	<p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface.</p> <p>When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p>
Reference	configure filter ipv6-exception <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-sap *number*

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

Synopsis	Public SAP ID
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> public-sap <i>number</i>
Tree	<i>public-sap</i>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-group *reference*

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

Synopsis	Tunnel group ID
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> tunnel-group <i>reference</i>
Tree	<i>tunnel-group</i>
Reference	configure <i>isa</i> tunnel-group <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> ipv4
Tree	<i>ipv4</i>
Description	Commands in this context configure the IPv4 command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Description	<p>When configured to true, the router forwards packets received on a local router interface to the subnet broadcast address of another IP interface.</p> <p>When configured to false, this router does not allow directed broadcasts and the packets are discarded.</p> <p>Allowing directed broadcasts is a well-known mechanism used for denial-of-service attacks.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the BFD command options for the associated IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *number*

Synopsis	Receive interval
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd receive <i>number</i>
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Terminate on the CPM network processor auto – Terminate on the system-selected termination point fp – Terminate on the forwarding plane
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

Synopsis	Enter the dhcp context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp
Tree	dhcp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of DHCP
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gi-address *ipv4-unicast-address*

Synopsis	GI address for the DHCP relay
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp gi-address <i>ipv4-unicast-address</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option-82

Synopsis	Enter the option-82 context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action keyword

Synopsis	Action to take with received DHCP Option 82
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 action keyword
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

circuit-id

Synopsis	Enter the circuit-id context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple

Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

if-name

Synopsis	Use the interface name for the circuit ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id if-name
Tree	if-name
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the circuit ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id

Synopsis	Use the port ID for the circuit ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id port-id
Tree	port-id
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	<p>When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.</p> <p>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.</p>
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-id

Synopsis	Enter the remote-id context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	User-defined ASCII string for the remote ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Use the MAC address for the remote ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the remote ID
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id *boolean*

Synopsis	Send the port ID in the VSO
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option port-id <i>boolean</i>
Tree	port-id
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

service-id *boolean*

Synopsis Send the service ID in the Vendor Specific Option

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 dhcp option-82 vendor-specific-option](#) [service-id](#) *boolean*

Tree [service-id](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

string *string-not-all-spaces*

Synopsis User-defined ASCII string for the VSO

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 dhcp option-82 vendor-specific-option](#) [string](#) *string-not-all-spaces*

Tree [string](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

system-id *boolean*

Synopsis Send the system ID in the VSO

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 dhcp option-82 vendor-specific-option](#) [system-id](#) *boolean*

Tree [system-id](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

relay-plain-bootp *boolean*

Synopsis Relay plain BOOTP messages

Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp relay-plain-bootp <i>boolean</i>
Tree	relay-plain-bootp
Description	When configured to true , the system relays plain BOOTP messages. When configured to false , the system considers the plain BOOTP packets as malformed DHCP packets; therefore, the system does not relay the messages.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv4-unicast-address*

Synopsis	IP addresses for DHCP server requests
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp server <i>ipv4-unicast-address</i>
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	8
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp src-ip-addr <i>keyword</i>
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

trusted *boolean*

Synopsis	Relay untrusted packets
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 dhcp trusted <i>boolean</i>
Tree	trusted
Description	<p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp
Tree	icmp
Description	Commands in this context configure Internet Control Message Protocol (ICMP) parameters on a network IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

param-problem

Synopsis Enter the **param-problem** context

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 icmp param-problem](#)

Tree [param-problem](#)

Description Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of sent Parameter Problem messages

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 icmp param-problem](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

number *number*

Synopsis Maximum number of Parameter Problem messages to send

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 icmp param-problem](#) [number](#) *number*

Tree [number](#)

Range 10 to 1000

Default 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirects

Synopsis	Enter the redirects context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp redirects <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp ttl-expired number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp ttl-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unreachables

Synopsis	Enter the unreachables context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp unreachables
Tree	unreachables

Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp unreachablees admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp unreachablees number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 icmp unreachablees seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-helper-address *ipv4-unicast-address*

Synopsis	IP address of the target UDP broadcast gateway
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 ip-helper-address <i>ipv4-unicast-address</i>
Tree	ip-helper-address
Description	This command configures the redirection of broadcast UDP packets received on the associated interface to the specified helper gateway address, and then to the gateway.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat

Synopsis	Enable the nat context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 nat
Tree	nat
Description	Commands in this context enable NAT and configure CPM NAT policies for the IPv4 interface. These commands must be used in conjunction with NAT pools where the pool application is configured with the configure router nat outside pool applications use-interface-ip command.
Introduced	25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-nat-policy *reference*

Synopsis CPM NAT policy association with public IPv4 interface

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv4 nat cpm-nat-policy** *reference*

Tree [cpm-nat-policy](#)

Description This command associates a CPM NAT policy to the interface. The NAT policy applies to traffic that either originates from, or is destined to, the local node itself (CPM traffic). Specifically, it is used when the traffic is routed through a public NAT IPv4 interface in the outside routing context.

A CPM NAT policy should be used when the local node communicates with public networks over NAT, and the source or destination is a local interface within the outside routing context. This can include the public IPv4 interface or any other interface assigned to that routing context.

Reference **configure** **service** **nat cpm-nat-policy** *external-named-item*

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-spf-nat-policy *reference*

Synopsis CPM NAT policy for static port forwards

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv4 nat cpm-spf-nat-policy** *reference*

Tree [cpm-spf-nat-policy](#)

Description This command associates a CPM NAT policy to the interface for static port forwards. The configurations for traffic using static port forwards to a local IP address in the outside routing context are separate from those used for other CPM traffic going through NAT. This command allows the router to apply different NAT behavior for port-forwarded traffic than for general traffic originating from the local node.

Reference **configure** **service** **nat cpm-nat-policy** *external-named-item*

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv4 neighbor-discovery**

Tree	neighbor-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i>
Tree	learn-unsolicited
Description	<p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit

Synopsis	Enter the limit context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit
Tree	limit
Description	<p>Commands in this context configure the maximum number of dynamic neighbor entries that can be learned on the interface</p> <p>When the number of entries reaches the threshold (the configured percentage) of this limit, the system sends an SNMP trap.</p> <p>When the limit is exceeded, the system learns no new entries until an entry expires and traffic to these destinations is dropped. Already learned entries are refreshed.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Range	0 to 524288
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold value that triggers a warning message
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i>
Tree	proactive-refresh
Description	When configured to true , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to false , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

remote-proxy-arp *boolean*

Synopsis Enable remote proxy ARP on the interface

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 neighbor-discovery remote-proxy-arp](#) *boolean*

Tree [remote-proxy-arp](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

retry-timer *number*

Synopsis ARP retry interval

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 neighbor-discovery retry-timer](#) *number*

Tree [retry-timer](#)

Range 1 to 300

Units deciseconds

Default 50

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

static-neighbor [[ipv4-address](#)] *ipv4-address*

Synopsis Enter the **static-neighbor** list instance

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv4 neighbor-discovery static-neighbor](#) *ipv4-address*

Tree [static-neighbor](#)

Description Commands in this context configure a static ARP entry that associates an IP address with a MAC address for the core router instance.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ipv4-address] *ipv4-address*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i> mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor-unnumbered

Synopsis	Enable the static-neighbor-unnumbered context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Description	Commands in this context configure the static ARP MAC for an unnumbered interface. This entry overrides the dynamic ARP entry on the unnumbered interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

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

Synopsis	MAC address for the static neighbor
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary

Synopsis	Enable the primary context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 primary
Tree	primary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 primary address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 primary broadcast <i>keyword</i>
Tree	broadcast
Description	<p>This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.</p> <p>This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.</p>
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gre-termination *boolean*

Synopsis	Enable GRE termination
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 primary gre-termination <i>boolean</i>
Tree	gre-termination
Description	When configured to true , the router terminates MPLS-over-GRE and IP-over-GRE packets for destination IP addresses from a user-defined subnet. The user defines a subnet for the termination of GRE packets by executing this command on a numbered network IP interface or a loopback interface.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 primary tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

secondary [*address*] *ipv4-unicast-address*

Synopsis	Enter the secondary list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>

Tree	secondary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>
Tree	secondary
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> broadcast <i>keyword</i>
Tree	broadcast
Description	<p>This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.</p> <p>This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.</p>
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> igp-inhibit <i>boolean</i>

Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unnumbered

Synopsis	Enter the unnumbered context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 unnumbered
Tree	unnumbered
Description	Commands in this context configure an IP interface as an unnumbered interface and specify the IP address to use for the interface. An operator can configure unnumbered interfaces to conserve IP addresses.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv4-unicast-address*

Synopsis	IP address to associate with unnumbered IP interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 unnumbered ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-int-name *interface-name*

Synopsis	Unnumbered IP interface name
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Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 unnumbered <i>ip-int-name</i> <i>interface-name</i>
Tree	ip-int-name
String length	1 to 32
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system

Synopsis	Use system IP address for the unnumbered IP interface
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 unnumbered system
Tree	system
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-check

Synopsis	Enable the urpf-check context
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 urpf-check
Tree	urpf-check
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-default *boolean*

Synopsis	Ignore default routes when performing a uRPF check
Context	configure <i>router</i> <i>named-item-64</i> interface <i>interface-name</i> ipv4 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Description	<p>When configured to true, the router ignores default routes while performing a uRPF check to determine the validity of incoming packets.</p> <p>When configured to false, default routes are considered eligible.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis Unicast RPF check mode

Context **configure** *router* *named-item-64* *interface* *interface-name* *ipv4* *urpf-check* *mode* *keyword*

Tree *mode*

Options
 strict – Check source address match in RT and interface
 loose – Check source address match in RT only
 strict-no-ecmp – Check source address match in ECMP route

Default strict

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vrrp [*virtual-router-id*] *number*

Synopsis Enter the **vrrp** list instance

Context **configure** *router* *named-item-64* *interface* *interface-name* *ipv4* *vrrp* *number*

Tree *vrrp*

Description Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its Virtual Router Identifier (VRID) and a set of IP addresses.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis Virtual Router Identifier (VRID) for the IP interface

Context **configure** *router* *named-item-64* *interface* *interface-name* *ipv4* *vrrp* *number*

Tree *vrrp*

Range 1 to 255

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Password for simple text authentication
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 94

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup ipv4-unicast-address

Synopsis	Virtual router IP addresses for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number backup ipv4-unicast-address
Tree	backup
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7705 SAR Gen 2 Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context assign a Bidirectional Forwarding Detection (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism that speeds up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP</p>

advertisement message. In addition, the standby VRRP routers transition to a master state to speed up convergence.

The VRRP election process takes place based on the advertisement messages sent by all VRRP routers.

Only one BFD session can be assigned to any VRRP or SRRP instance, but multiple SRRP or VRRP sessions can use the same BFD session.

Introduced25.3.R2

Platforms7705 SAR Gen 2

dest-ip *ipv4-address*

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

SynopsisDestination IP address to use for BFD session

Context**configure** **router** *named-item-64* **interface** *interface-name* **ipv4 vrrp number bfd-liveness**
dest-ip *ipv4-address*

Tree**dest-ip**

String format'*ipv4-address*' must use only digits and dots (no %zone)
'*ipv4-address*' must be a.b.c.d with each octet 0-255 (no zone-id)

NotesThis element is mandatory.

Introduced25.3.R2

Platforms7705 SAR Gen 2

interface-name *interface-name*

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

SynopsisName of the interface running BFD

Context**configure** **router** *named-item-64* **interface** *interface-name* **ipv4 vrrp number bfd-liveness**
interface-name *interface-name*

Tree**interface-name**

String length1 to 32

NotesThis element is mandatory.

Introduced25.3.R2

Platforms 7705 SAR Gen 2

service-name *service-name*



WARNING:

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

Synopsis	Administrative service name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> bfd-liveness service-name <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> mac <i>mac-unicast-address</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many</p>

hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number master-int-inherit <i>boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number message-interval <i>number</i>
Tree	message-interval
Description	This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*



WARNING:

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

Synopsis	VRRP instance to follow a specified operational group
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *boolean*



WARNING:

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

Synopsis	Designate the virtual router instance as owner
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number owner <i>boolean</i>
Tree	owner

Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*



WARNING:

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

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number passive <i>boolean</i>
Tree	passive
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number ping-reply <i>boolean</i>
Tree	ping-reply
Description	When configured to true , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).

When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	VRRP priority control policy
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number preempt <i>boolean</i>
Tree	preempt
Description	When configured to true , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.

When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Base priority for the VRRP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number priority <i>number</i>
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh-reply boolean

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number ssh-reply <i>boolean</i>
Tree	ssh-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv4 vrrp number traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6
Tree	ipv6
Description	Commands in this context configure the IPv6 command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [**ipv6-address**] *ipv6-address*

Synopsis	Enter the address list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i>
Tree	address
Description	<p>Commands in this context assign an IPv6 address to the interface.</p> <p>A global IPv6 address and <i>prefix-length</i> combined create a locally configured interface IPv6 prefix and subnet. The defined global IP prefix must be unique within the context of a routing instance. It cannot overlap with any other existing global IP prefix defined on another IP interface within the same routing context.</p> <p>This overlap restriction is not applicable for IPv6 host addresses configured on loopback interfaces. For example, an IPv6 loopback host address configured on a loopback interface may overlap with another prefix subnet configured on another IP interface within the same routing context.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**ipv6-address**] *ipv6-address*

Synopsis	IPv6 address assigned to the interface
----------	--

Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 address</i> <i>ipv6-address</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*



WARNING:

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

Synopsis	Enable Duplicate Address Detection
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 address</i> <i>ipv6-address</i> <i>duplicate-address-detection</i> <i>boolean</i>
Tree	<i>duplicate-address-detection</i>
Description	When configured to true , the router enables Duplicate Address Detection (DAD). When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eui-64 *boolean*



WARNING:

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

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 address</i> <i>ipv6-address</i> <i>eui-64</i> <i>boolean</i>
Tree	<i>eui-64</i>
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> prefix-length <i>number</i>
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> primary-preference <i>number</i>
Tree	primary-preference
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd
Tree	bfd
Description	Commands in this context configure the BFD command options for the associated IPv6 interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *number*

Synopsis	Receive interval
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd receive <i>number</i>
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Terminate on the CPM network processor auto – Terminate on the system-selected termination point fp – Terminate on the forwarding plane
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	<p>When configured to true, the router enables Duplicate Address Detection (DAD) on the interface.</p> <p>When configured to false, the router disables DAD on a per-interface basis. This prevents the router from performing a DAD check on the interface. All IPv6 addresses on an interface with DAD disabled, immediately enter a preferred state, without checking for uniqueness on the interface. This is useful for interfaces that enter a looped state during troubleshooting and are operationally disabled when the loop is detected, requiring manual intervention to clear the DAD violation.</p>

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 forward-ipv4-packets <i>boolean</i>
Tree	forward-ipv4-packets
Description	<p>When configured to true, the router can use an IPv6-only interface, with no configured IPv4 addresses, to forward IPv4 packets that originate or terminate locally.</p> <p>The interface reports that its IPv4 operational state is up if its IPv6 operational state is up. Not all protocols observe the interface as up from an IPv4 perspective. This command mostly supports BGP routing use cases; see RFC 5549 for details.</p> <p>When configured to false, the router prevents IPv4 packets from being forwarded if there are no configured IPv4 subnets.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp6

Synopsis	Enter the icmp6 context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6
Tree	icmp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-too-big

Synopsis	Enter the packet-too-big context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of Packet Too Big message sends

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 icmp6 packet-too-big admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

number *number*

Synopsis Number of Packet Too big Messages issued per time frame

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 icmp6 packet-too-big number** *number*

Tree **number**

Range 10 to 1000

Default 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

seconds *number*

Synopsis Time used to limit Packet Too Big messages

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 icmp6 packet-too-big seconds** *number*

Tree **seconds**

Range 1 to 60

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

param-problem

Synopsis	Enter the param-problem context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 param-problem
Tree	param-problem
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 param-problem admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 param-problem seconds <i>number</i>
Tree	seconds

Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirects

Synopsis	Enter the redirects context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 redirects
Tree	redirects
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 redirects admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 redirects number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time-exceeded

Synopsis	Enter the time-exceeded context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number

Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unreachables

Synopsis	Enter the unreachables context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 unreachables
Tree	unreachables
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 icmp6 unreachables admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 icmp6 unreachablees</i> <i>number number</i>
Tree	<i>number</i>
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 icmp6 unreachablees</i> <i>seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-local-address

Synopsis	Enter the link-local-address context
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 link-local-address</i>
Tree	<i>link-local-address</i>
Description	<p>Commands in this context configure the IPv6 link-local address that is used as a virtual SRRP IPv6 address by the master SRRP node. This address is sent in the Router Advertisements initiated by the master SRRP node. Clients use this address as IPv6 default-gateway. Both SRRP nodes, master and backup, must be configured with the same link-local address.</p> <p>Only one link-local address is allowed per interface.</p> <p>Caution: Removing a manually configured link-local address may impact routing protocols or static routes that have a dependency on that address. Nokia does not recommend removing a link-local address when there are active IPv6 subscriber hosts on an IES or VPRN interface.</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-address*

Synopsis	IPv6 link-local address
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 link-local-address address <i>ipv6-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 link-local-address duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD) on the interface. When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 local-dhcp-server reference
Tree	local-dhcp-server
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv6 neighbor-discovery](#)

Tree [neighbor-discovery](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

learn-unsolicited *keyword*

Synopsis Type of entries learned from unsolicited NA messages

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv6 neighbor-discovery learn-unsolicited](#) *keyword*

Tree [learn-unsolicited](#)

Description This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.

When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.

Options global, link-local, both

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

limit

Synopsis Enter the **limit** context

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [ipv6 neighbor-discovery limit](#)

Tree [limit](#)

Description Commands in this context configure the maximum amount of dynamic IPv6 neighbor entries that can be learned on an IP interface.

When the number of dynamic neighbor entries reaches the configured percentage of this limit the system sends an SNMP trap. When the limit is exceeded, no new entries are learned until an entry expires and traffic to these destinations is dropped. Entries that have already been learned are refreshed.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

log-only *boolean*

Synopsis Generate log entries when limit is reached

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 neighbor-discovery limit log-only** *boolean*

Tree **log-only**

Description When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.

When configured to **false**, the router does not send the warning message.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-entries *number*

Synopsis Maximum number of entries learned on an IP interface

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 neighbor-discovery limit max-entries** *number*

Tree **max-entries**

Description This command configures the maximum number of entries that can be learned on an IP interface.

When unconfigured, no maximum limit is imposed.

Range 0 to 102400

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

threshold *number*

Synopsis Threshold percentage that triggers a warning message

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 neighbor-discovery limit threshold** *number*

Tree **threshold**

Range 1 to 100

Units percent

Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i>
Tree	local-proxy-nd
Description	<p>When configured to true, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to false, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i>
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i>

Tree	proxy-nd-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor [[ipv6-address](#)] *ipv6-address*

Synopsis	Enter the static-neighbor list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 neighbor-discovery static-neighbor <i>ipv6-address</i>
Tree	static-neighbor
Description	Commands in this context configure an IPv6-to-MAC address mapping on the interface. Use this command if a directly attached IPv6 node does not support ICMPv6 neighbor

discovery, or for some reason, a static address must be used. This command can only be used on Ethernet media.

The IPv6 address must be on the subnet that was configured from the IPv6 **address** or a **link-local-address** commands.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis IPv6 address corresponding to the physical address
Context **configure** *router* *named-item-64* *interface* *interface-name* *ipv6* *neighbor-discovery* *static-neighbor* *ipv6-address*
Tree *static-neighbor*
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mac-address *mac-address*

Synopsis MAC address for the static neighbor
Context **configure** *router* *named-item-64* *interface* *interface-name* *ipv6* *neighbor-discovery* *static-neighbor* *ipv6-address* *mac-address* *mac-address*
Tree *mac-address*
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

tcp-mss *number*

Synopsis TCP maximum segment size for the IPv6 interface
Context **configure** *router* *named-item-64* *interface* *interface-name* *ipv6* *tcp-mss* *number*
Tree *tcp-mss*
Range 1220 to 9726
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

urpf-check

Synopsis	Enable the urpf-check context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 urpf-check
Tree	urpf-check
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 urpf-check mode <i>keyword</i>
Tree	mode
Options	strict – Check source address match in RT and interface loose – Check source address match in RT only strict-no-ecmp – Check source address match in ECMP route
Default	strict
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp [[virtual-router-id](#)] *number*

Synopsis	Enter the vrrp list instance
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i>
Tree	vrrp

Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its virtual router identifier (VRID) and a set of IP addresses.
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i>
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup ipv6-address

Synopsis	Virtual router IP addresses for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number backup ipv6-address
Tree	backup
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7705 SAR Gen 2 Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context assign a bidirectional forwarding detect (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism for use in speeding up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP Advertisement message. In addition, the standby VRRP routers transition to a Master state to speed convergence.</p> <p>The normal VRRP election process takes place based on the Advertisement messages sent by all VRRP routers.</p>

There can be only one BFD session assigned to any specific VRRP or SRRP instance, but there can be multiple SRRP or VRRP sessions using the same BFD session.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

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

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

Synopsis Destination address for the BFD session

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 vrrp number bfd-liveness**
dest-ip (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree **dest-ip**

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*

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

Synopsis Name of the interface running BFD

Context **configure** **router** *named-item-64* **interface** *interface-name* **ipv6 vrrp number bfd-liveness**
interface-name *interface-name*

Tree **interface-name**

String length 1 to 32

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

service-name *service-name***WARNING:**

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

Synopsis	Administrative service name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number bfd-liveness service-name <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number mac <i>mac-unicast-address</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p>

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> master-int-inherit <i>boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> message-interval <i>number</i>
Tree	message-interval
Description	This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	10 to 4095
Units	centiseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*



WARNING:

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

Synopsis	VRRP instance to follow a specified operational group
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *boolean*

**WARNING:**

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

Synopsis	Designate the virtual router instance as owner
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number owner <i>boolean</i>
Tree	owner

Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*



WARNING:

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

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 vrrp number</i> <i>passive</i> <i>boolean</i>
Tree	<i>passive</i>
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>ipv6 vrrp number</i> <i>ping-reply</i> <i>boolean</i>
Tree	<i>ping-reply</i>
Description	When configured to true , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).

When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	VRRP priority control policy
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> preempt <i>boolean</i>
Tree	preempt
Description	When configured to true , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.

When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Base priority for the VRRP
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-forwarding boolean

Synopsis	Allow standby router to forward traffic
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ipv6 vrrp number traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	<p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Enter the lag context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> lag
Tree	lag

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-sync-timer

Synopsis	Enter the ldp-sync-timer context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ldp-sync-timer
Tree	ldp-sync-timer
Description	Commands in this context set associated parameters for the synchronization of an IGP and LDP.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-of-lib *boolean*

Synopsis	Terminate LDP synchronization timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ldp-sync-timer end-of-lib <i>boolean</i>
Tree	end-of-lib
Description	This command configures the system to terminate the LDP synchronization timer early for a specific session to an LDP peer, if the IGP interface receives LDP End-of-LIB Typed Wildcard FEC messages for every FEC type negotiated.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time interval for the LDP synchronization timer
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ldp-sync-timer seconds <i>number</i>
Tree	seconds
Range	1 to 1800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> load-balancing
Tree	load-balancing
Description	Commands in this context configure interface per-flow load-balancing options that apply to traffic that enters this interface and that egresses over a LAG or ECMP. This is a per-interface setting. Load-balancing options enabled on the interface level overwrite options that can also be enabled on the system level.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> load-balancing ip-load-balancing <i>keyword</i>
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> load-balancing lsr-load-balancing <i>keyword</i>
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

loopback

Synopsis Use interface as a loopback interface

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [loopback](#)

Tree [loopback](#)

Description When configured, this interface is used as a loopback interface.
This command and the **vas-if-type** command are mutually exclusive.

Notes The following elements are part of a choice: **loopback** or **port**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis MAC address of the interface

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [mac](#) *mac-unicast-address*

Tree [mac](#)

Description This command assigns a specific MAC address to an IP interface. Only one MAC address can be assigned to an IP interface. When multiple **mac** commands are entered, the last command overwrites the previous command.

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mac-accounting *boolean*

Synopsis Enable MAC accounting functionality

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* [mac-accounting](#) *boolean*

Tree [mac-accounting](#)

Description When configured to **true**, the router enables MAC accounting functionality.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

network-domains

Synopsis	Enter the network-domains context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> network-domains
Tree	network-domains
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-domain [**domain-name**] *reference*

Synopsis	Add a list entry for network-domain
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> network-domains network-domain <i>reference</i>
Tree	network-domain
Description	<p>Commands in this context assign an interface to a network domain. The router then takes the network domain into account during SAP ingress queue allocation for VPLS SAP.</p> <p>The network domain association can only be done in the base routing context. An operator can associate a network domain with an interface without a physical port being specified, but the configuration has no effect until a corresponding port, or LAG, is defined.</p> <p>Single interfaces can be associated with multiple network domains.</p>
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**domain-name**] *reference*

Synopsis	Network domain name
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> network-domains network-domain <i>reference</i>
Tree	network-domain
Reference	configure router <i>named-item-64</i> network-domains network-domain <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port (*port-and-encap* | *keyword*)

Synopsis	Port to bind to this interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> port (<i>port-and-encap</i> <i>keyword</i>)
Tree	port
Description	This command creates an association between a logical IP interface and a physical port. An operator can also associate an interface with the system (loopback address).
String length	1 to 45
Options	system
Notes	The following elements are part of a choice: loopback or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ptp-hw-assist

Synopsis	Enter the ptp-hw-assist context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ptp-hw-assist
Tree	ptp-hw-assist
Description	<p>Commands in this context enable the port-based timestamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.</p> <p>Only one interface per physical port can have port-based timestamping assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the PTP timestamping assist
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

qos

Synopsis Enter the **qos** context

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* **qos**

Tree [qos](#)

Description Commands in this context associate a network QoS policy with a network IP interface. Only one network QoS policy can be associated with an IP interface at one time. Attempts to associate a second QoS policy return an error.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

egress-instance *number*

Synopsis Port egress queue group instance for this interface

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* **qos** [egress-instance](#) *number*

Tree [egress-instance](#)

Description This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.

Range 1 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

egress-port-redirect-group *reference*

Synopsis QoS queue group name

Context **configure** [router](#) *named-item-64* [interface](#) *interface-name* **qos** [egress-port-redirect-group](#) *reference*

Tree [egress-port-redirect-group](#)

Description This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.

Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> qos ingress-fp-redirect-group <i>reference</i>
Tree	ingress-fp-redirect-group
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> qos ingress-instance <i>number</i>
Tree	ingress-instance
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> qos network-policy <i>reference</i>
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Description	<p>This command configures the ToS marking state.</p> <p>This command is used to alter the default trusted state to a non-trusted state. When configured to trusted or default, the ToS field is not remarked by egress network IP interfaces unless the egress network IP interface has the remark-trusted state set, in which case the egress network interface treats all VPRN and network IP interfaces as untrusted.</p> <p>When configured to untrusted, all egress network IP interfaces remark IP packets received on the network interface according to the egress marking definitions on each network interface.</p>
Options	trusted, untrusted
Default	trusted
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

untrusted

Synopsis	Enable the untrusted context
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> untrusted
Tree	untrusted
Description	<p>Commands in this context configure the untrusted state for a network IP interface.</p> <p>The untrusted state identifies the participating interfaces in the label security feature for prefixes of a VPN family at an inter-AS boundary. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>The user normally applies this command to an inter-AS interface. PIP keeps track of the untrusted status of each interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-forwarding *keyword*

Synopsis	Default action for selective ILM
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Context	configure router <i>named-item-64</i> interface <i>interface-name</i> untrusted default-forwarding <i>keyword</i>
Tree	default-forwarding
Description	<p>This command specifies the default forwarding behavior of labeled packets received on this interface.</p> <p>This command sets the default behavior for an untrusted interface in the datapath and for all ILMs. When enabling the label security for VPN IPv4 or VPN IPv6 prefixes, BGP programs the data path to provide an exception to the normal way of forwarding away from the default for those VPRN ILMs.</p> <p>When the default behavior is to forward packets, the router checks labeled packets in the normal way against the table of programmed ILMs to decide if packets are dropped or forwarded in a GRT, a VRF, or a L2 service context.</p> <p>When the specified behavior is to drop packets, all labeled packets received on the interface are automatically dropped.</p>
Options	forward, drop
Default	forward
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-selected-vprns *boolean*

Synopsis	Enable uRPF checking of incoming traffic on interface
Context	configure router <i>named-item-64</i> interface <i>interface-name</i> urpf-selected-vprns <i>boolean</i>
Tree	urpf-selected-vprns
Description	<p>When configured to true, the router performs uRPF checks of incoming traffic on the network interface for the following:</p> <ul style="list-style-type: none"> • Packets associated with the global routing table (base router) context • Packets associated with VPRNs that have enabled the uRPF check using the configure service vprn network ingress urpf-check command <p>When configured to false, the router performs uRPF checks for all ingress traffic on the network interface (associated with the base router and all VPRNs) based on the IPv4 and IPv6 urpf-check command configuration options of the network interface.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vas-if-type *keyword*

Synopsis	Value Added Service (VAS) facing interface type
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Context	configure <i>router</i> <i>named-item-64</i> <i>interface</i> <i>interface-name</i> <i>vas-if-type</i> <i>keyword</i>
Tree	<i>vas-if-type</i>
Options	to-from-access, to-from-network, to-from-both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec

Synopsis	Enter the ipsec context
Context	configure <i>router</i> <i>named-item-64</i> <i>ipsec</i>
Tree	<i>ipsec</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-chassis-shunt-interface [*name*] *interface-name*

Synopsis	Enter the multi-chassis-shunt-interface list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>ipsec</i> <i>multi-chassis-shunt-interface</i> <i>interface-name</i>
Tree	<i>multi-chassis-shunt-interface</i>
Description	This command configures the multi-chassis shunting interface name for the peer.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[*name*] *interface-name*

Synopsis	Multi-chassis shunt interface name
Context	configure <i>router</i> <i>named-item-64</i> <i>ipsec</i> <i>multi-chassis-shunt-interface</i> <i>interface-name</i>
Tree	<i>multi-chassis-shunt-interface</i>
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

next-hop

Synopsis	Enter the next-hop context
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunt-interface <i>interface-name</i> next-hop
Tree	next-hop
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

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

Synopsis	Next hop address for the shunting interface
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunt-interface <i>interface-name</i> next-hop address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-chassis-shunting-profile [**name**] *named-item*

Synopsis	Enter the multi-chassis-shunting-profile list instance
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunting-profile <i>named-item</i>
Tree	multi-chassis-shunting-profile
Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	Multi-chassis shunting profile name
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunting-profile <i>named-item</i>
Tree	multi-chassis-shunting-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

peer [\[ip-address\]](#) *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunting-profile <i>named-item</i> peer <i>reference</i>
Tree	peer
Max. instances	3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ip-address] *reference*

Synopsis	Peer address
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunting-profile <i>named-item</i> peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-chassis-shunt-interface *reference*

Synopsis	Multi-chassis shunt interface
Context	configure router <i>named-item-64</i> ipsec multi-chassis-shunting-profile <i>named-item</i> peer <i>reference</i> multi-chassis-shunt-interface <i>reference</i>
Tree	multi-chassis-shunt-interface
Description	This command configures the shunting interface name for the peer.
Reference	configure router <i>named-item-64</i> ipsec multi-chassis-shunt-interface <i>interface-name</i>
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

security-policy [[id](#)] *number*

Synopsis Enter the **security-policy** list instance

Context **configure** [router](#) *named-item-64* [ipsec](#) [security-policy](#) *number*

Tree [security-policy](#)

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis IPsec security policy ID

Context **configure** [router](#) *named-item-64* [ipsec](#) [security-policy](#) *number*

Tree [security-policy](#)

Range 1 to 32768

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [router](#) *named-item-64* [ipsec](#) [security-policy](#) *number* [entry](#) *number*

Tree [entry](#)

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[entry-id] *number*

Synopsis IPsec security policy entry ID

Context **configure** [router](#) *named-item-64* [ipsec](#) [security-policy](#) *number* [entry](#) *number*

Tree [entry](#)

Range 1 to 32

Notes This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-ip

Synopsis	Enter the local-ip context
Context	configure router named-item-64 ipsec security-policy number entry number local-ip
Tree	local-ip
Description	<p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv4-prefix*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure router named-item-64 ipsec security-policy number entry number local-ip address <i>ipv4-prefix</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure router named-item-64 ipsec security-policy number entry number local-ip any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-ipv6

Synopsis	Enter the local-ipv6 context
Context	configure router <i>named-item-64</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6
Tree	local-ipv6
Description	<p>Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv6-prefix*

Synopsis	Destination IPv6 address of the aggregate route
Context	configure router <i>named-item-64</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 address <i>ipv6-prefix</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure router <i>named-item-64</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ip

Synopsis	Enter the remote-ip context
Context	configure router <i>named-item-64</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip
Tree	remote-ip
Description	<p>Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.</p> <p>The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv4-prefix*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure router <i>named-item-64</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip address <i>ipv4-prefix</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure router <i>named-item-64</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ipv6

Synopsis	Enter the remote-ipv6 context
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Context	configure <i>router</i> <i>named-item-64</i> <i>ipsec security-policy</i> <i>number</i> <i>entry</i> <i>number</i> <i>remote-ipv6</i>
Tree	<i>remote-ipv6</i>
Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv6-prefix*

Synopsis	Destination IPv6 address of the aggregate route
Context	configure <i>router</i> <i>named-item-64</i> <i>ipsec security-policy</i> <i>number</i> <i>entry</i> <i>number</i> <i>remote-ipv6</i> <i>address</i> <i>ipv6-prefix</i>
Tree	<i>address</i>
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure <i>router</i> <i>named-item-64</i> <i>ipsec security-policy</i> <i>number</i> <i>entry</i> <i>number</i> <i>remote-ipv6</i> <i>any</i> <i>boolean</i>
Tree	<i>any</i>
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router</i> <i>named-item-64</i> <i>ipv6</i>
Tree	<i>ipv6</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context

Context **configure** [router](#) *named-item-64* [ipv6](#) [neighbor-discovery](#)

Tree [neighbor-discovery](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

reachable-time *number*

Synopsis Neighbor reachability detection timer

Context **configure** [router](#) *named-item-64* [ipv6](#) [neighbor-discovery](#) [reachable-time](#) *number*

Tree [reachable-time](#)

Range 30 to 3600

Default 30

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

stale-time *number*

Synopsis Neighbor discovery cache entry stale time

Context **configure** [router](#) *named-item-64* [ipv6](#) [neighbor-discovery](#) [stale-time](#) *number*

Tree [stale-time](#)

Range 60 to 65535

Default 14400

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-advertisement

Synopsis Enter the **router-advertisement** context

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#)

Tree [router-advertisement](#)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns-options

Synopsis	Enable the dns-options context
Context	configure router <i>named-item-64</i> ipv6 router-advertisement dns-options
Tree	dns-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rdnss-lifetime (*keyword* | *number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	configure router <i>named-item-64</i> ipv6 router-advertisement dns-options rdnss-lifetime (<i>keyword</i> <i>number</i>)
Tree	rdnss-lifetime
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0 4 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv6-address*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure router <i>named-item-64</i> ipv6 router-advertisement dns-options server <i>ipv6-address</i>
Tree	server
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface *[ip-int-name] interface-name*

Synopsis Enter the **interface** list instance

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#) [interface](#) *interface-name*

Tree [interface](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-int-name] *interface-name*

Synopsis Router interface name

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#) [interface](#) *interface-name*

Tree [interface](#)

String length 1 to 32

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of router advertisement

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#) [interface](#) *interface-name* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

current-hop-limit *number*

Synopsis Hop limit advertised in RA messages

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#) [interface](#) *interface-name* [current-hop-limit](#) *number*

Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns-options

Synopsis	Enable the dns-options context
Context	configure router named-item-64 ipv6 router-advertisement interface interface-name dns-options
Tree	dns-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	configure router named-item-64 ipv6 router-advertisement interface interface-name dns-options include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	configure router named-item-64 ipv6 router-advertisement interface interface-name dns-options rdnss-lifetime (<i>number</i> <i>keyword</i>)
Tree	rdnss-lifetime
Range	0 4 to 3600
Units	seconds
Options	infinite
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv6-address*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> dns-options server <i>ipv6-address</i>
Tree	server
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

managed-configuration *boolean*

Synopsis	Set the managed address configuration flag
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> managed-configuration <i>boolean</i>
Tree	managed-configuration
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-advertisement-interval *number*

Synopsis	Maximum time between sending advertisement messages
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	4 to 1800
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-advertisement-interval *number*

Synopsis	Minimum interval between router advertisement messages
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	3 to 1350
Units	seconds
Default	200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu *number*

Synopsis	MTU for sending packets to the router
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> mtu <i>number</i>
Tree	mtu
Range	1280 to 9800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nd-router-preference *keyword*

Synopsis	Default router preference for Router Advertisements
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> nd-router-preference <i>keyword</i>
Tree	nd-router-preference
Description	<p>This command configures the default router preference for Router Advertisements (RAs) and allows IPv6 hosts to discover and select a default gateway address by listening to RAs.</p> <p>This feature provides basic traffic engineering functionality for host devices. When this command is applied, the router advertises the respective router preference to the connected host to assist in its selection of the most appropriate default gateway on a link.</p> <p>This extension is backward compatible, both for routers (setting the router preference bits) and hosts (interpreting the router preference bits). These bits are ignored by hosts that do not implement the RFC 4191 functionality by configuring this command. Similarly, hosts that do not implement the RFC 4191 functionality interpret the</p>

	values sent by devices that do not implement the RFC 4191 extension as a medium preference.
Options	medium, high, low
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ipv6-prefix](#)] *ipv6-prefix*

Synopsis	Enter the prefix list instance
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Max. instances	254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 address prefix
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

autonomous *boolean*

Synopsis Set the autonomous flag value

Context **configure** **router** *named-item-64* **ipv6** **router-advertisement** **interface** *interface-name*
prefix *ipv6-prefix* **autonomous** *boolean*

Tree **autonomous**

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

on-link *boolean*

Synopsis Use prefix for on-link determination

Context **configure** **router** *named-item-64* **ipv6** **router-advertisement** **interface** *interface-name*
prefix *ipv6-prefix* **on-link** *boolean*

Tree **on-link**

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

preferred-lifetime (*keyword* | *number*)

Synopsis Remaining time that the prefix remains preferred

Context **configure** **router** *named-item-64* **ipv6** **router-advertisement** **interface** *interface-name*
prefix *ipv6-prefix* **preferred-lifetime** (*keyword* | *number*)

Tree **preferred-lifetime**

Range 0 to 4294967294

Units seconds

Options infinite

Default 604800

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

valid-lifetime (*keyword* | *number*)

Synopsis	Remaining time in which the prefix is still valid
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> prefix <i>ipv6-prefix</i> valid-lifetime (<i>keyword</i> <i>number</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-time *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-time *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	configure router <i>named-item-64</i> ipv6 router-advertisement interface <i>interface-name</i> retransmit-time <i>number</i>
Tree	retransmit-time
Range	0 to 1800000
Units	milliseconds
Default	0
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

router-lifetime *number*

Synopsis Lifetime value in neighbor advertisement messages

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#) [interface](#) *interface-name* [router-lifetime](#) *number*

Tree [router-lifetime](#)

Range 0 | 4 to 9000

Units seconds

Default 1800

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

use-virtual-mac *boolean*

Synopsis Use VRRP virtual MAC address for advertisement message

Context **configure** [router](#) *named-item-64* [ipv6](#) [router-advertisement](#) [interface](#) *interface-name* [use-virtual-mac](#) *boolean*

Tree [use-virtual-mac](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6-te-router-id

Synopsis Enter the **ipv6-te-router-id** context

Context **configure** [router](#) *named-item-64* [ipv6-te-router-id](#)

Tree [ipv6-te-router-id](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface *reference*

Synopsis Network IP interface name to obtain IP address

Context **configure** [router](#) *named-item-64* [ipv6-te-router-id](#) [interface](#) *reference*

Tree	interface
Description	<p>This command specifies the interface name from which to obtain the IP address to use as the IPv6 TE Router ID. This router ID uniquely identifies the router to other routers as IPv6 TE capable in an IGP TE domain.</p> <p>IS-IS advertises this information using the IPv6 TE Router ID TLV.</p>
Reference	configure router <i>named-item-64</i> interface <i>interface-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

isis [\[isis-instance\]](#) *number*

Synopsis	Enter the isis list instance
Context	configure router <i>named-item-64</i> isis <i>number</i>
Tree	isis
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[isis-instance] *number*

Synopsis	IS-IS instance ID
Context	configure router <i>named-item-64</i> isis <i>number</i>
Tree	isis
Range	0 to 127
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-system-id *system-id-no-default*

Synopsis	Additional system ID
Context	configure router <i>named-item-64</i> isis <i>number</i> additional-system-id <i>system-id-no-default</i>
Tree	additional-system-id
String length	14

String format	'system-id-no-default' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Max. instances	4
Notes	This element is ordered by the user.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IS-IS instance
Context	configure router <i>named-item-64</i> isis <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-passive-only *boolean*

Synopsis	Advertise prefixes that belong to passive interfaces
Context	configure router <i>named-item-64</i> isis <i>number</i> advertise-passive-only <i>boolean</i>
Tree	advertise-passive-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *keyword*

Synopsis	Router capabilities advertisement to neighbors
Context	configure router <i>named-item-64</i> isis <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	area, as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-tunnel-link *boolean*

Synopsis	Allow use of forwarding adjacency
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> advertise-tunnel-link <i>boolean</i>
Tree	advertise-tunnel-link
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-l1isis *mac-address*

Synopsis	Destination MAC address for all L1 IS-IS routers
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> all-l1isis <i>mac-address</i>
Tree	all-l1isis
Default	01:80:C2:00:00:14
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-l2isis *mac-address*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> all-l2isis <i>mac-address</i>
Tree	all-l2isis
Default	01:80:C2:00:00:15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-address *area-address*

Synopsis	Area address portion of the NSAP address
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> area-address <i>area-address</i>
Tree	area-address
String length	2 to 38
String format	'area-address' must match NSAP area-address hex pattern (length 2..38)

Max. instances	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-check *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	configure router <i>named-item-64</i> isis <i>number</i> authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	configure router <i>named-item-64</i> isis <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the authentication key to verify PDUs sent from neighbors in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure router <i>named-item-64</i> isis <i>number</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type
Context	configure router <i>named-item-64</i> isis <i>number</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	configure router <i>named-item-64</i> isis <i>number</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

csnp-on-p2p *boolean*

Synopsis	Send periodic CSNP PDUs on point-to-point interfaces
Context	configure router <i>named-item-64</i> isis <i>number</i> csnp-on-p2p <i>boolean</i>
Tree	csnp-on-p2p
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database-export

Synopsis	Enable the database-export context
Context	configure router <i>named-item-64</i> isis <i>number</i> database-export
Tree	database-export
Description	Commands in this context enable the population of the extended TE Database (TE-DB) with the link-state information from a specific IGP instance.

This information includes the IGP, TE, and SR information, prefix SID sub-TLV, adjacency SID sub-TLV, and router SR capability TLV.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure router <i>named-item-64</i> isis <i>number</i> database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Description	Commands in this context correlate, along with the Autonomous System Number (ASN), the BGP-LS NLRI advertisements of multiple BGP-LS speakers of the same IGP domain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value number

Synopsis	BGP-LS ID sent in the BGP-LS NLRI
Context	configure router <i>named-item-64</i> isis <i>number</i> database-export bgp-ls-identifier value <i>number</i>
Tree	value
Description	<p>This command configures the BGP-LS ID to export.</p> <p>If an NRC-P network domain has multiple IGP domains, a user must configure BGP-LS speakers within each IGP domain with the same unique ASN, BGP-LS ID tuple. The BGP-LS identifier is optional and is only sent in a BGP-LS NLRI if configured in the IGP instance of an IGP domain.</p> <p>Note: If this IGP instance participates in traffic engineering with RSVP-TE or SR-TE, the traffic-engineering command configuration is not strictly required because enabling the extended TE-DB populates this information automatically. However, Nokia recommends enabling the traffic-engineering command to make the configuration consistent with other routers in the network that do not require the enabling of the extended TE-DB.</p>
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-identifier *number*

Synopsis	IGP instance ID in the BGP-LS NLRI
Context	configure router <i>named-item-64</i> isis <i>number</i> database-export igp-identifier <i>number</i>
Tree	igp-identifier
Description	<p>This command configures the unique identifier for the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances.</p> <p>The concept of instance ID defined in IS-IS (RFC 6822) is unique within a routing domain. A user can remove any overlap by configuring the new identifier value to be unique within an IGP domain when this router sends the IGP link-state information using BGP-LS.</p>
Max. range	0 to 18446744073709551615
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-ls-only *boolean*

Synopsis	Encode only reachable link-state information
Context	configure router <i>named-item-64</i> isis <i>number</i> database-export reachable-ls-only <i>boolean</i>
Tree	reachable-ls-only
Description	<p>When configured to true, the router, acting as a BGP-LS producer, must withdraw all link-state objects it has advertised in BGP, in accordance with section 5.9 of RFC 9552. This withdrawal occurs when the node that originated the corresponding LSPs is determined to be unreachable in the IGP based on the failure of a reachability check for that node. This withdrawal operation assists network controllers in assessing a reachable IGP topology, even in networks with segmented areas. For backward compatibility, the default behavior remains unchanged.</p> <p>When configure to false, the router continues to send link-state objects even for links that fail an IGP reachability check.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-route-tag *number*

Synopsis	Route tag for the default route
Context	configure router <i>named-item-64</i> isis <i>number</i> default-route-tag <i>number</i>
Tree	default-route-tag

Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enter the entropy-label context
Context	configure router <i>named-item-64</i> isis <i>number</i> entropy-label
Tree	entropy-label
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-tunnel-elc *boolean*

Synopsis	Enable override of received ELC advertisements
Context	configure router <i>named-item-64</i> isis <i>number</i> entropy-label override-tunnel-elc <i>boolean</i>
Tree	override-tunnel-elc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure router <i>named-item-64</i> isis <i>number</i> export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure router <i>named-item-64</i> isis <i>number</i> export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>named-item-64</i> isis <i>number</i> export-limit <i>number</i> <i>number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>named-item-64</i> isis <i>number</i> export-policy <i>reference</i>
Tree	<i>export-policy</i>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure <i>policy-options</i> <i>policy-statement</i> <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-flooding

Synopsis	Enter the fast-flooding context
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding
Tree	fast-flooding
Description	Commands in this context configure IS-IS fast flooding, as specified in RFC 9681. A configuration in this context applies to interfaces that belong to the instance unless it is overridden under an interface.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-receiver

Synopsis	Enable the lsp-receiver context
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-receiver
Tree	lsp-receiver
Description	Commands in this context configure how the router receives LSPs and how it acknowledges them. The router can also advertise its flooding values to neighbors.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

advertise-flooding-tlv *boolean*

Synopsis	Enable the advertise-flooding-tlv context
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-receiver advertise-flooding-tlv <i>boolean</i>
Tree	advertise-flooding-tlv
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Maximum number of LSPs receivable without an intervening delay
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-receiver burst-size <i>number</i>

Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp number

Synopsis	Number of received LSPs that triggers the immediate sending of a PSNP
Context	configure router named-item-64 isis number fast-flooding lsp-receiver lsp-per-psnp number
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval number

Synopsis	Interval between LSP transmissions that can be sustained on reception
Context	configure router named-item-64 isis number fast-flooding lsp-receiver lsp-transmit-interval number
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

psnp-interval number

Synopsis	Interval between periodic transmissions of Partial Sequence Number PDUs (PSNPs)
Context	configure router named-item-64 isis number fast-flooding lsp-receiver psnp-interval number
Tree	psnp-interval
Range	50 to 1000

Units	milliseconds
Default	200
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-window *number*

Synopsis	Maximum receive window
Context	configure router named-item-64 isis number fast-flooding lsp-receiver receive-window number
Tree	receive-window
Range	10 to 1000
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-sender

Synopsis	Enable the lsp-sender context
Context	configure router named-item-64 isis number fast-flooding lsp-sender
Tree	lsp-sender
Description	Commands in this context configure how the router transmits LSPs. The sender can use flooding values received from a neighbor, PSNP acknowledgments, and locally configured defaults to control the number and rate of transmitted LSPs.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-burst-size *boolean*

Synopsis	Enforce to not exceed the advertised LSP burst size
Context	configure router named-item-64 isis number fast-flooding lsp-sender enforce-burst-size boolean
Tree	enforce-burst-size
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-receive-window *boolean*

Synopsis	Enforce the advertised receive window
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-sender enforce-receive-window <i>boolean</i>
Tree	enforce-receive-window
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

local-defaults

Synopsis	Enter the local-defaults context
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-sender local-defaults
Tree	local-defaults
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Default burst size
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-sender local-defaults burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Default number of LSPs per PSNP
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-sender local-defaults lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90

Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Default interval between LSP transmissions
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-sender local-defaults lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-window *number*

Synopsis	Default receive window.
Context	configure router <i>named-item-64</i> isis <i>number</i> fast-flooding lsp-sender local-defaults receive-window <i>number</i>
Tree	receive-window
Range	10 to 1000
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

flexible-algorithms

Synopsis	Enter the flexible-algorithms context
Context	configure router <i>named-item-64</i> isis <i>number</i> flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure IS-IS parameters for flexible algorithm participation.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	configure router <i>named-item-64</i> isis <i>number</i> flexible-algorithms admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	configure router <i>named-item-64</i> isis <i>number</i> flexible-algorithms advertise-admin-group <i>keyword</i>
Tree	advertise-admin-group
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Options	prefer-ag, eag-only, ag-eag
Default	prefer-ag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo [[flex-algo-id](#)] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Description	Commands in this context configure an IS-IS flexible algorithm. When flexible algorithm is configured in an IS-IS instance, the IS-IS instance is configured for all levels (Level 1 and Level 2).
Max. instances	7
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[flex-algo-id] number

Synopsis Flexible algorithm ID

Context **configure** [router](#) *named-item-64* [isis](#) *number* [flexible-algorithms](#) [flex-algo](#) *number*

Tree [flex-algo](#)

Range 128 to 255

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise reference

Synopsis Flexible Algorithm Definition advertisement

Context **configure** [router](#) *named-item-64* [isis](#) *number* [flexible-algorithms](#) [flex-algo](#) *number* [advertise](#) *reference*

Tree [advertise](#)

Description This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).

The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.

Reference **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

loopfree-alternate

Synopsis Enable the **loopfree-alternate** context

Context **configure** [router](#) *named-item-64* [isis](#) *number* [flexible-algorithms](#) [flex-algo](#) *number* [loopfree-alternate](#)

Tree [loopfree-alternate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure router <i>named-item-64</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i> micro-loop-avoidance
Tree	micro-loop-avoidance
Description	<p>This command configure flexible-algorithms-aware microloop avoidance. When enabled, the microloop configuration parameters are inherited from the base SPF.</p> <p>This command enables microloop avoidance with flexible algorithms for MT0. Microloop avoidance with flexible algorithms for MT2 is enabled when this command is enabled along with SR-MPLS MT2 using the configure router isis segment-routing multi-topology mt2 command.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	configure router <i>named-item-64</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i> participate <i>boolean</i>
Tree	participate
Description	<p>When configured to true, the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.</p> <p>When configured to false, flexible algorithm participation is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>named-item-64</i> isis <i>number</i> graceful-restart
Tree	graceful-restart
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-mode *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	configure router <i>named-item-64</i> isis <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure router <i>named-item-64</i> isis <i>number</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	IS-IS Hello message padding
Context	configure router <i>named-item-64</i> isis <i>number</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-attached-bit *boolean*

Synopsis	Ignore attached bit on received Layer 1 LSPs
Context	configure router <i>named-item-64</i> isis <i>number</i> ignore-attached-bit <i>boolean</i>
Tree	ignore-attached-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-lsp-errors *boolean*

Synopsis	Ignore LSP packets with errors
Context	configure router <i>named-item-64</i> isis <i>number</i> ignore-lsp-errors <i>boolean</i>
Tree	ignore-lsp-errors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-narrow-metric *boolean*

Synopsis	Ignore links with narrow metrics
Context	configure router <i>named-item-64</i> isis <i>number</i> ignore-narrow-metric <i>boolean</i>
Tree	ignore-narrow-metric
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut
Tree	igp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RSVP-TE or SR-TE shortcut
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-sr-over-srte *boolean***WARNING:**

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

Synopsis	Enable SR over SR-TE LSPs
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	<p>When configured to true, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with allow-sr-over-srte explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit allow-sr-over-srte configuration.</p> <p>Under ECMP, when this command is configured to true, preference is given to the SR-TE LSPs with allow-sr-over-srte explicitly configured over the LSPs that do not have allow-sr-over-srte configured.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-next-hop**WARNING:**

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

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Address family type for tunnel next hop
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution *keyword*

Synopsis	Resolution mode for IGP shortcut tunnels
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Options	none, filter, any, match-family-ip
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> isis <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

iid-tlv *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	configure router <i>named-item-64</i> isis <i>number</i> iid-tlv <i>boolean</i>
Tree	iid-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure router <i>named-item-64</i> isis <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>

Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [\[interface-name\]](#) *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-set [\[id\]](#) *reference*

Synopsis	Add a list entry for adjacency-set
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *reference*

Synopsis	Adjacency set ID
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Reference	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enable the ipv4 context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv4
Tree	ipv4

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv4 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv6 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

conditional-advertise-prefix *reference*

Synopsis	Policy to conditionally advertise interface prefixes
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> conditional-advertise-prefix <i>reference</i>

Tree	conditional-advertise-prefix
Description	<p>This command specifies the policy that allows IS-IS, OSPF, and OSPFv3 to selectively advertise system or loopback interface prefixes (including associated SIDs and SRv6 locators) only when conditions defined in the route policy are met.</p> <p>The route policy evaluates the presence or absence of specific routes in the routing table, typically using constructs like route-exists. If the policy evaluates to accept, the interface prefix is advertised; if not, the prefix is suppressed.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> csnp-interval <i>number</i>
Tree	csnp-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-instance *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> default-instance <i>boolean</i>
Tree	default-instance
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-normalization

Synopsis	Enable the delay-normalization context
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> delay-normalization
Tree	delay-normalization
Description	Commands in this context configure delay normalization for the interface within the IGP instance. When configured, the normalized delay is used by the TLVs within the IGP link-state packets. When unconfigured, the measured delay is used by the respective TLVs within the IGP link-state packets.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-tolerance-interval *number*

Synopsis	Interval between two delay values on the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> delay-normalization delay-tolerance-interval <i>number</i>
Tree	delay-tolerance-interval
Description	This command defines the interval used by the IGP to differentiate between two delay values.
Range	1 to 10000000
Units	microseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-delay *number*

Synopsis	Minimum delay on the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> delay-normalization minimum-delay <i>number</i>
Tree	minimum-delay
Range	1 to 10000000
Units	microseconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-flooding

Synopsis	Enter the fast-flooding context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding
Tree	fast-flooding
Description	Commands in this context configure IS-IS fast flooding for the interface, as specified in RFC 9681. Values configured in this context override the corresponding instance-level configuration.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-receiver

Synopsis	Enter the lsp-receiver context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver
Tree	lsp-receiver
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LSP receiver
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

advertise-flooding-tlv *boolean*

Synopsis	Enable the advertise-flooding-tlv context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver advertise-flooding-tlv <i>boolean</i>
Tree	advertise-flooding-tlv

Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Maximum number of LSPs receivable without an intervening delay
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Number of received LSPs that triggers the immediate sending of a PSNP
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Interval between LSP transmissions that can be sustained on reception
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100

Introduced	26.10.R1
Platforms	7705 SAR Gen 2

psnp-interval *number*

Synopsis	Interval between periodic transmissions of Partial Sequence Number PDUs (PSNPs)
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver psnp-interval <i>number</i>
Tree	psnp-interval
Range	50 to 1000
Units	milliseconds
Default	200
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-window *number*

Synopsis	Maximum receive window
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver receive-window <i>number</i>
Tree	receive-window
Range	10 to 1000
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-sender

Synopsis	Enter the lsp-sender context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender
Tree	lsp-sender
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LSP sender
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-burst-size *boolean*

Synopsis	Enforce to not exceed the advertised LSP burst size
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender enforce-burst-size <i>boolean</i>
Tree	enforce-burst-size
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-receive-window *boolean*

Synopsis	Enforce the advertised receive window
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender enforce-receive-window <i>boolean</i>
Tree	enforce-receive-window
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

local-defaults

Synopsis	Enter the local-defaults context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults
Tree	local-defaults

Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Default burst size
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Default number of LSPs per PSNP
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Default interval between LSP transmissions
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	26.10.R1

Platforms 7705 SAR Gen 2

receive-window *number*

Synopsis	Default receive window.
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults receive-window <i>number</i>
Tree	receive-window
Range	10 to 1000
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

flex-algo [[flex-algo-id](#)] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i>
Tree	flex-algo
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-node-sid

Synopsis	Enable the ipv4-node-sid context
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i> ipv4-node-sid
Tree	ipv4-node-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i> ipv4-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i> ipv4-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-node-sid

Synopsis	Enable the ipv6-node-sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i> ipv6-node-sid
Tree	ipv6-node-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index number

Synopsis	Node SID index for this interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i> ipv6-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label number

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> flex-algo <i>number</i> ipv6-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication boolean

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-key encrypted-leaf

Synopsis	Authentication key or hash string for Hello PDUs
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> hello-authentication-key <i>encrypted-leaf</i>
Tree	hello-authentication-key
Description	This command specifies the authentication key or hash string for Hello PDUs in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-type *keyword*

Synopsis	Hello authentication type
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> hello-padding <i>keyword</i>

Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> interface-type <i>keyword</i>
Tree	interface-type
Options	point-to-point, broadcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-adjacency-sid

Synopsis	Enable the ipv4-adjacency-sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-adjacency-sid
Tree	ipv4-adjacency-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Adjacency SID label
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-adjacency-sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-multicast <i>boolean</i>
Tree	ipv4-multicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-node-sid

Synopsis	Enable the ipv4-node-sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-node-sid
Tree	ipv4-node-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv4-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-adjacency-sid

Synopsis	Enable the ipv6-adjacency-sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-adjacency-sid
Tree	ipv6-adjacency-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Adjacency SID label
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-adjacency-sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-multicast *boolean*

Synopsis	Enable IPv6 multicast routing for the interface
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-multicast <i>boolean</i>
Tree	ipv6-multicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-node-sid

Synopsis	Enable the ipv6-node-sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-node-sid
Tree	ipv6-node-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> ipv6-unicast <i>boolean</i>
Tree	ipv6-unicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i>
Tree	level
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i>
Tree	level

Options	1, 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-key *encrypted-leaf*

Synopsis	Authentication key for Hello PDUs
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-authentication-key <i>encrypted-leaf</i>
Tree	hello-authentication-key
Description	<p>This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.</p> <p>If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-type *keyword*

Synopsis	Hello authentication enabled on the context
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello authentication-key statement must also be included.
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Interval between Hello messages sent on this level
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 20000
Units	seconds
Default	9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-multiplier *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
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Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> ipv4-multicast-metric <i>number</i>
Tree	ipv4-multicast-metric
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 multicast
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> ipv6-multicast-metric <i>number</i>
Tree	ipv6-multicast-metric
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> ipv6-unicast-metric <i>number</i>
Tree	ipv6-unicast-metric
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric number

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive boolean

Synopsis	Passive interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Router to become the designated router on a multi-access network
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> priority <i>number</i>
Tree	priority
Range	0 to 127
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sd-offset number

Synopsis	Value of the signal degrade offset
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> sd-offset <i>number</i>

Tree	sd-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sf-offset *number*

Synopsis	Value of the signal fail offset
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> sf-offset <i>number</i>
Tree	sf-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level-capability *keyword*

Synopsis	IS-IS levels for this interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load balancing weight
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Exclude Loopfree Alternative at the interface level
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lsp-pacing-interval *number*

Synopsis Interval for sending LSPs from interface

Context **configure** **router** *named-item-64* **isis** *number* **interface** *interface-name* **lsp-pacing-interval** *number*

Tree **lsp-pacing-interval**

Range 0 to 65535

Units milliseconds

Default 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mesh-group

Synopsis Enable the **mesh-group** context

Context **configure** **router** *named-item-64* **isis** *number* **interface** *interface-name* **mesh-group**

Tree **mesh-group**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

blocked

Synopsis Prevent the interface from flooding LSPs

Context **configure** **router** *named-item-64* **isis** *number* **interface** *interface-name* **mesh-group** **blocked**

Tree **blocked**

Notes The following elements are part of a choice: **blocked** or **value**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

value *number*

Synopsis Mesh group for the interface

Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>interface</i> <i>interface-name</i> <i>mesh-group</i> <i>value</i> <i>number</i>
Tree	<i>value</i>
Range	1 to 2000000000
Notes	The following elements are part of a choice: blocked or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Passive interface
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>interface</i> <i>interface-name</i> <i>passive</i> <i>boolean</i>
Tree	<i>passive</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>interface</i> <i>interface-name</i> <i>retransmit-interval</i> <i>number</i>
Tree	<i>retransmit-interval</i>
Range	1 to 65535
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>interface</i> <i>interface-name</i> <i>sid-protection</i> <i>boolean</i>
Tree	<i>sid-protection</i>

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag number

Synopsis	Route tag for IP address of interface
Context	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast-routing keyword

Synopsis	IS-IS topology for IPv4 multicast routing
Context	configure router <i>named-item-64</i> isis <i>number</i> ipv4-multicast-routing <i>keyword</i>
Tree	ipv4-multicast-routing
Options	false, native, mt
Default	native
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-routing boolean

Synopsis	Support IPv4 routing for IS-IS instance
Context	configure router <i>named-item-64</i> isis <i>number</i> ipv4-routing <i>boolean</i>
Tree	ipv4-routing
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-multicast-routing keyword

Synopsis	Topology to populate the IPv6 multicast RTM
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Context	configure router <i>named-item-64</i> isis <i>number</i> ipv6-multicast-routing <i>keyword</i>
Tree	ipv6-multicast-routing
Options	false, native, mt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-routing *keyword*

Synopsis	Routing topology for IPv6
Context	configure router <i>named-item-64</i> isis <i>number</i> ipv6-routing <i>keyword</i>
Tree	ipv6-routing
Options	false, native, mt
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-over-rsvp *boolean*

Synopsis	Allow LDP over RSVP processing
Context	configure router <i>named-item-64</i> isis <i>number</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-sync *boolean*

Synopsis	Use IGP-LDP synchronization feature on all interfaces participating in IS-IS routing protocol
Context	configure router <i>named-item-64</i> isis <i>number</i> ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i>
Tree	level
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key to verify PDUs sent on the interface
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key

Description	<p>This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.</p> <p>Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The authentication-type command must also be included.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state information of a specific IS-IS level from being exported into extended TE-DB
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> database-export-exclude <i>boolean</i>
Tree	database-export-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-ipv4-multicast-metric *number*

Synopsis	Default metric for IPv4 unicast
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> default-ipv4-multicast-metric <i>number</i>
Tree	default-ipv4-multicast-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-ipv6-multicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> default-ipv6-multicast-metric <i>number</i>
Tree	default-ipv6-multicast-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-ipv6-unicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	configure router <i>named-item-64</i> isis <i>number</i> level keyword default-ipv6-unicast-metric <i>number</i>
Tree	default-ipv6-unicast-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-metric *number*

Synopsis	Default metric
Context	configure router <i>named-item-64</i> isis <i>number</i> level keyword default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-preference *number*

Synopsis	External route preference for IS-IS level
Context	configure router <i>named-item-64</i> isis <i>number</i> level keyword external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure router <i>named-item-64</i> isis <i>number</i> level keyword hello-authentication <i>boolean</i>
Tree	hello-authentication

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-mtu-size *number*

Synopsis	LSP MTU size
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> lsp-mtu-size <i>number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	External route preference at level
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	configure router <i>named-item-64</i> isis <i>number</i> level <i>keyword</i> wide-metrics-only <i>boolean</i>
Tree	wide-metrics-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level-capability *keyword*

Synopsis	Routing level for instance
Context	configure router <i>named-item-64</i> isis <i>number</i> level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

link-group [[link-group-name](#)] *named-item*

Synopsis Enter the **link-group** list instance

Context **configure** [router](#) *named-item-64* [isis](#) *number* [link-group](#) *named-item*

Tree [link-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[link-group-name] *named-item*

Synopsis Link group name for the IS-IS protocol

Context **configure** [router](#) *named-item-64* [isis](#) *number* [link-group](#) *named-item*

Tree [link-group](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *very-long-description*

Synopsis Text description

Context **configure** [router](#) *named-item-64* [isis](#) *number* [link-group](#) *named-item* [description](#) *very-long-description*

Tree [description](#)

String length 1 to 255

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

level [[level-number](#)] *keyword*

Synopsis Enter the **level** list instance

Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>named-item</i> <i>level</i> <i>keyword</i>
Tree	<i>level</i>
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>named-item</i> <i>level</i> <i>keyword</i>
Tree	<i>level</i>
Options	1, 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast-metric-offset *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>named-item</i> <i>level</i> <i>keyword</i> <i>ipv4-multicast-metric-offset</i> <i>number</i>
Tree	<i>ipv4-multicast-metric-offset</i>
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-unicast-metric-offset *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>named-item</i> <i>level</i> <i>keyword</i> <i>ipv4-unicast-metric-offset</i> <i>number</i>
Tree	<i>ipv4-unicast-metric-offset</i>
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-multicast-metric-offset *number*

Synopsis	Offset value for the IPv6 multicast address family
Context	configure router <i>named-item-64</i> isis <i>number</i> link-group <i>named-item</i> level keyword ipv6-multicast-metric-offset <i>number</i>
Tree	ipv6-multicast-metric-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast-metric-offset *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	configure router <i>named-item-64</i> isis <i>number</i> link-group <i>named-item</i> level keyword ipv6-unicast-metric-offset <i>number</i>
Tree	ipv6-unicast-metric-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

member [**interface-name**] *reference*

Synopsis	Add a list entry for member
Context	configure router <i>named-item-64</i> isis <i>number</i> link-group <i>named-item</i> level keyword member <i>reference</i>
Tree	member
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *reference*

Synopsis	Router interface name for this link group
Context	configure router <i>named-item-64</i> isis <i>number</i> link-group <i>named-item</i> level keyword member <i>reference</i>
Tree	member

Reference	configure router <i>named-item-64</i> isis <i>number</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-members *number*

Synopsis	Minimum number of operational links
Context	configure router <i>named-item-64</i> isis <i>number</i> link-group <i>named-item</i> level keyword oper-members <i>number</i>
Tree	oper-members
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	configure router <i>named-item-64</i> isis <i>number</i> link-group <i>named-item</i> level keyword revert-members <i>number</i>
Tree	revert-members
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate augment-route-table <i>boolean</i>
Tree	augment-route-table
Description	<p>When configured to true, this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP.</p> <p>When configured to false, rLFA-specific information is not added to RTM entries.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude

Synopsis	Enter the exclude context
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

multi-homed-prefix

Synopsis	Enable the multi-homed-prefix context
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate multi-homed-prefix
Tree	multi-homed-prefix
Description	<p>Commands in this context enable multihomed prefix LFA for IS-IS routes (IP FRR), SR-ISIS tunnels, and SRv6-ISIS tunnels.</p> <p>This feature uses the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.</p> <p>This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of intra-area anycast prefixes.</p> <p>The computed IP next hop-based backup path is added to IS-IS routes of external /32 prefixes or /128 prefixes and intra-area /32 or /128 anycast prefixes in the RTM if the prefix is not protected by the base LFA or if the user set leaf preference command option is configured to all. The user must enable the configure routing-options ip-fast-reroute command to have these backup paths programmed into the FIB in the datapath.</p> <p>The computed IP next hop or repair tunnel-based backup path is also programmed for:</p> <ul style="list-style-type: none"> SR-ISIS node SID tunnels of external /32 IPv4 prefixes and /128 IPv6 prefixes, and node SID tunnels of intra-area /32 IPv4 anycast prefixes and /128 anycast IPv6 prefixes, in both algorithm 0 and flexible-algorithms SRv6-ISIS locator routes and tunnels of external prefixes and of intra-area anycast prefixes of any size, in both algorithm 0 and flexible algorithm numbers. <p>As a result, an SR-TE LSP, an SR-MPLS policy, or an SRv6 policy which uses an SR-ISIS SID or an SRv6-ISIS SID of those same prefixes in its configured or computed SID list benefits from the multihomed prefix LFA protection.</p> <p>Once the IP next-hop based multihomed prefix LFA is enabled, the extensions to compute an SR-TE repair tunnel for the multihomed prefix LFA in the case of SR-ISIS and SRv6-ISIS are automatically enabled if the user also enabled TI-LFA or Remote LFA. The computation reuses the SID list of the primary path or of the TI-LFA or Remote LFA backup path of the alternate ABR or ASBR or alternate owner router.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference keyword

Synopsis	Multihomed prefix LFA backup path preference
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Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>loopfree-alternate</i> <i>multi-homed-prefix</i> <i>preference</i> <i>keyword</i>
Tree	<i>preference</i>
Options	none, all
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>loopfree-alternate</i> <i>remote-lfa</i>
Tree	<i>remote-lfa</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-pq-cost *number*

Synopsis	Maximum cost of destination node during reverse SPF calculation
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>loopfree-alternate</i> <i>remote-lfa</i> <i>max-pq-cost</i> <i>number</i>
Tree	<i>max-pq-cost</i>
Max. range	0 to 4294967295
Default	4261412864
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-protect

Synopsis	Enable the node-protect context
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>loopfree-alternate</i> <i>remote-lfa</i> <i>node-protect</i>
Tree	<i>node-protect</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPFs
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate remote-lfa node-protect max-pq-nodes <i>number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context enable the use of the Topology-Independent LFA (TI-LFA) algorithm in the LFA SPF calculation for this IS-IS instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate ti-lfa max-sr-frr-labels <i>number</i>
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>named-item-64</i> isis <i>number</i> loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-lifetime *number*



WARNING:

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

Synopsis	Amount of time during which an LSP is considered valid
Context	configure router <i>named-item-64</i> isis <i>number</i> lsp-lifetime <i>number</i>
Tree	lsp-lifetime
Range	350 to 65535
Units	seconds
Default	1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-minimum-remaining-lifetime *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	configure router <i>named-item-64</i> isis <i>number</i> lsp-minimum-remaining-lifetime <i>number</i>
Tree	lsp-minimum-remaining-lifetime
Range	350 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-mtu-size *number*

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

Synopsis	LSP MTU size
Context	configure router <i>named-item-64</i> isis <i>number</i> lsp-mtu-size <i>number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-refresh

Synopsis	Enter the lsp-refresh context
Context	configure router <i>named-item-64</i> isis <i>number</i> lsp-refresh
Tree	lsp-refresh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	configure router <i>named-item-64</i> isis <i>number</i> lsp-refresh half-lifetime <i>boolean</i>
Tree	half-lifetime
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Refresh timer interval
Context	configure router <i>named-item-64</i> isis <i>number</i> lsp-refresh interval <i>number</i>

Tree	interval
Range	150 to 65535
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-part-tlv

Synopsis	Enter the multi-part-tlv context
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-part-tlv
Tree	multi-part-tlv
Description	Commands in this context configure the behavior of the MP-TLV capability.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

neighbor *boolean*

Synopsis	Enable origination of multi-part neighbor TLVs
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-part-tlv neighbor <i>boolean</i>
Tree	neighbor
Description	When configured to true , the router splits neighbor TLVs (TLV 22 and TLV 222) that exceed the maximum size into MP-TLVs of the same type and key. When configured to false , the router truncates neighbor TLVs to fit the maximum size limit.
Default	true
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

srlg *boolean*

Synopsis	Enable origination of multi-part SRLG TLVs
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-part-tlv srlg <i>boolean</i>
Tree	srlg
Description	When configured to true , the router splits SRLG TLVs (TLV 138 and TLV 238) that exceed the maximum size into MP-TLVs of the same type and key.

	When configured to false , the router truncates SRLG TLVs to fit the maximum size limit.
Default	true
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

multi-topology

Synopsis	Enable the multi-topology context
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-topology
Tree	multi-topology
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-topology ipv4-multicast <i>boolean</i>
Tree	ipv4-multicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-multicast *boolean*

Synopsis	Support IPv6 topology (MT4)
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-topology ipv6-multicast <i>boolean</i>
Tree	ipv6-multicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	configure router <i>named-item-64</i> isis <i>number</i> multi-topology ipv6-unicast <i>boolean</i>

Tree	ipv6-unicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-import

Synopsis	Enter the multicast-import context
Context	configure router <i>named-item-64</i> isis <i>number</i> multicast-import
Tree	multicast-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	configure router <i>named-item-64</i> isis <i>number</i> multicast-import ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Submit IPv6 routes into the multicast RPF of the RTM
Context	configure router <i>named-item-64</i> isis <i>number</i> multicast-import ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload

Synopsis	Enable the overload context
Context	configure router <i>named-item-64</i> isis <i>number</i> overload

Tree	overload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure router <i>named-item-64</i> isis <i>number</i> overload max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-export-external <i>boolean</i>
Tree	overload-export-external
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-export-interlevel <i>boolean</i>
Tree	overload-export-interlevel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-fib-error-notify-only

Synopsis	Enable the overload-fib-error-notify-only context
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-fib-error-notify-only

Tree	overload-fib-error-notify-only
Description	<p>Commands in this context configure the IS-IS router to send a notification when an overload condition occurs while programming the FIB, instead of advertising the overload condition of the router in the IS-IS LSP.</p> <p>Note: Nokia recommends being careful using this command. When you configure the router not to advertise the IS-IS overload state in the IS-IS LSP, other routers are not instructed to take the overloaded router out of the IS-IS forwarding topology and this will cause suboptimal forwarding and non-deterministic behavior on the overloaded router. To avoid changing the default IS-IS overflow behavior, leave this command disabled.</p> <p>When this command is configured, the IS-IS router enters a suboptimal state where it sends only a notification trap; transit traffic can still use the router in this state.</p> <p>The IS-IS router tracks the segment routing prefix SIDs where FIB programming failed. With the retry command configured, the router retries programming the segment routing prefix SIDs in the FIB using this tracked information.</p> <p>When this command is not configured, during normal operation, the system may force the router to enter an overload state because of a lack of FIB resources. In this state, the router is used to terminate traffic and is not used to transit traffic.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry *number*

Synopsis	Time to retry programming failed entries in the FIB
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-fib-error-notify-only retry <i>number</i>
Tree	retry
Description	<p>This command configures the time the router uses to retry programming the failed entries in the FIB.</p> <p>The overload-fib-error-notify-only command must be configured to use the retry timer. The removal of the overload-fib-error-notify-only configuration causes the system to program the failed entries in the FIB by triggering an immediate SPF.</p>
Range	10 to 1800
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-include-locators *boolean*

Synopsis	Advertise SRv6 locators if IS-IS instance overloads
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Context	configure router <i>named-item-64</i> isis <i>number</i> overload-include-locators <i>boolean</i>
Tree	overload-include-locators
Description	When configured to true , if the IS-IS instance goes into overload (because of resource depletion or manual configuration), the router includes SRv6 locators when it advertises links and prefixes with max-metric .
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-on-boot
Tree	overload-on-boot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-on-boot max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	configure router <i>named-item-64</i> isis <i>number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
Context	configure router <i>named-item-64</i> isis <i>number</i> poi-tlv <i>boolean</i>
Tree	poi-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-attributes-tlv <i>boolean</i>
Tree	prefix-attributes-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-limit

Synopsis	Enable the prefix-limit context
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-limit
Tree	prefix-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-limit limit <i>number</i>
Tree	limit
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

log-only *boolean*

Synopsis Send warning message when the prefix limit is reached

Context **configure** *router* *named-item-64* *isis* *number* *prefix-limit* **log-only** *boolean*

Tree *log-only*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

overload-timeout (*number* | *keyword*)

Synopsis Time in overload state when prefix limit is reached

Context **configure** *router* *named-item-64* *isis* *number* *prefix-limit* **overload-timeout** (*number* | *keyword*)

Tree *overload-timeout*

Range 1 to 1800

Units seconds

Options forever

Default forever

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

warning-threshold *number*

Synopsis Threshold value to trigger a warning message to be sent

Context **configure** *router* *named-item-64* *isis* *number* *prefix-limit* **warning-threshold** *number*

Tree *warning-threshold*

Range 0 to 100

Units percent

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prefix-unreachable

Synopsis	Enter the prefix-unreachable context
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-unreachable
Tree	prefix-unreachable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-upas *number*

Synopsis	Maximum number of UPAs the router can advertise
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-unreachable maximum-number-upas <i>number</i>
Tree	maximum-number-upas
Description	This command configures a limit for the number of UPAs the router can advertise. If overrun, a system log is generated and additional UPAs are not advertised.
Range	1 to 8192
Default	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

process-received-upa *boolean*

Synopsis	Process received UPA
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-unreachable process-received-upa <i>boolean</i>
Tree	process-received-upa
Description	<p>When configured to true, the router enables processing of received UPAs from other routers. Received UPAs are inserted into the unicast routing table as unreachable prefixes. When configured on an Area Boundary Router (ABR), received UPAs are inserted into the unreachable prefix table and redistributed into the other areas.</p> <p>When configured to false, received UPAs are ignored by the router.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

upa-lifetime *number*

Synopsis	Time during which a UPA is advertised
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-unreachable upa-lifetime <i>number</i>
Tree	upa-lifetime
Range	30 to 1800
Units	seconds
Default	180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

upa-metric *number*

Synopsis	Metric to an advertised UPA
Context	configure router <i>named-item-64</i> isis <i>number</i> prefix-unreachable upa-metric <i>number</i>
Tree	upa-metric
Range	4261412865 to 4294967294
Default	4261412865
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

psnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	configure router <i>named-item-64</i> isis <i>number</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-bandwidth *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	configure router <i>named-item-64</i> isis <i>number</i> reference-bandwidth <i>number</i>

Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router <i>named-item-64</i> isis <i>number</i> rib-priority
Tree	rib-priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure router <i>named-item-64</i> isis <i>number</i> rib-priority high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	configure router <i>named-item-64</i> isis <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>named-item-64</i>
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag number

Synopsis	Tag value that is used to match IS-IS routes
Context	configure router <i>named-item-64</i> isis <i>number</i> rib-priority high tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id router-id**WARNING:**

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

Synopsis	Unique router ID for the ISIS instance
Context	configure router <i>named-item-64</i> isis <i>number</i> router-id <i>router-id</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing
Tree	segment-routing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
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Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold
Description	<p>This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.</p> <p>When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.</p> <ul style="list-style-type: none"> • IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV. • The adjacency SID hold timer starts. • The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges. • If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value. • If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value. • A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.
Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-set [*id*] *number*

Synopsis Enter the **adjacency-set** list instance

Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i>
Tree	adjacency-set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *number*

Synopsis	Identifier for specified adjacency set
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i>
Tree	adjacency-set
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise the adjacency set when all links terminate on the same neighboring node
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family *keyword*

Synopsis	Address family for the adjacency set
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i> family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Default	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parallel *boolean*

Synopsis	Require all members of the adjacency set to terminate on the same neighboring node
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i> parallel <i>boolean</i>
Tree	parallel
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid

Synopsis	Enable the sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i> sid
Tree	sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Adjacency SID label
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-set <i>number</i> sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing adjacency-sid allocate-dual-sids <i>boolean</i>
Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing entropy-label <i>boolean</i>
Tree	entropy-label
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-tunnel-table *keyword*

Synopsis	Tunnel table export policies to export tunneled routes
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing export-tunnel-table <i>keyword</i>
Tree	export-tunnel-table
Options	Idp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mapping-server

Synopsis	Enter the mapping-server context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing mapping-server
Tree	mapping-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IS-IS mapping server
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing mapping-server admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-sid-map [[sid-index](#)] *number*

Synopsis	Enter the node-sid-map list instance
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[sid-index] *number*

Synopsis SID index of a mapping server Prefix-SID

Context **configure** **router** *named-item-64* **isis** *number* **segment-routing** **mapping-server** **node-sid-map** *number*

Tree **node-sid-map**

Max. range 0 to 4294967295

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

clear-n-flag *boolean*

Synopsis Clear the node-sid flag (N-flag)

Context **configure** **router** *named-item-64* **isis** *number* **segment-routing** **mapping-server** **node-sid-map** *number* **clear-n-flag** *boolean*

Tree **clear-n-flag**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-prefix *ipv4-unicast-prefix*

Synopsis Prefix of a mapping server Prefix-SID

Context **configure** **router** *named-item-64* **isis** *number* **segment-routing** **mapping-server** **node-sid-map** *number* **ip-prefix** *ipv4-unicast-prefix*

Tree **ip-prefix**

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

level-capability *keyword*

Synopsis	Flags to assign in SID Label Binding TLV advertised by Segment Routing Mapping Server
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range *number*

Synopsis	Range of addresses and their associated prefix SIDs
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> range <i>number</i>
Tree	range
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

set-flags

Synopsis	Enter the set-flags context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> set-flags
Tree	set-flags
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-s *boolean*

Synopsis	SID Label Binding TLV to be flooded across the entire routing domain
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Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>mapping-server</i> <i>node-sid-map</i> <i>number</i> <i>set-flags</i> <i>bit-s</i> <i>boolean</i>
Tree	<i>bit-s</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-sid-depth

Synopsis	Enter the maximum-sid-depth context
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>maximum-sid-depth</i>
Tree	<i>maximum-sid-depth</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>maximum-sid-depth</i> <i>override-bmi</i> <i>number</i>
Tree	<i>override-bmi</i>
Description	<p>This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.</p> <p>When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.</p>
Range	0 to 13
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> <i>segment-routing</i> <i>maximum-sid-depth</i> <i>override-erld</i> <i>number</i>
Tree	<i>override-erld</i>

Description	<p>This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.</p> <p>When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.</p>
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing micro-loop-avoidance
Tree	micro-loop-avoidance
Description	<p>Commands in this context configure the microloop avoidance feature in the IGP instance. This feature prevents microloops from using Segment Routing (SR) loop-free tunnels for packets that are forwarded over SR IS-IS node SID tunnels.</p> <p>These commands enable microloop avoidance for MT0. Microloop avoidance for MT2 is enabled when this command is enabled along with SR-MPLS MT2 using the configure router isis segment-routing multi-topology mt2 command.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fib-delay *number*

Synopsis	FIB delay before programming new primary next-hops
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing micro-loop-avoidance fib-delay <i>number</i>
Tree	fib-delay
Description	This command specifies the delay time before programming the new next-hops for the SR tunnel.
Range	1 to 300
Units	deciseconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-topology

Synopsis	Enter the multi-topology context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing multi-topology
Tree	multi-topology
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mt2 boolean

Synopsis	Support IPv6 routing topology (MT2)
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing multi-topology mt2 <i>boolean</i>
Tree	mt2
Description	When configured to true , the router enables SR-MPLS for MS-ISIS MT, which enables Segment Routing in MT2.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing prefix-sid-range
Tree	prefix-sid-range
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	BGP global SR range allocation
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.

Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-index *number*



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

Synopsis	Upper bound value for the local SID index
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 1048575
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-label *number*



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

Synopsis	Lower bound value for the local label offset
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 1048575
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlb reference

Synopsis	Segment routing local block
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing srlb <i>reference</i>
Tree	srlb
Reference	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-mtu number

Synopsis	Tunnel MTU size
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing tunnel-mtu <i>number</i>
Tree	tunnel-mtu
Range	512 to 9786
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-table-pref number

Synopsis	Preference of SR tunnels created by the IGP instance
Context	configure router <i>named-item-64</i> isis <i>number</i> segment-routing tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref

Description This command configures the TTM preference of SR tunnels created by the IGP instance. This is used in the case of BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the new tunnel binding commands are configured to the **any** value which parses the TTM for tunnels in the protocol preference order. The user can choose to either go with the global TTM preference or list explicitly the tunnel types they want to use. When they list the tunnel types explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected one fails. Also, a reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to TTM a SR tunnel entry for each resolved remote node SID prefix and programs the data path with the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the setting of the default preference of the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as **SR-ISIS** and **SR-OSPF**).

The global default TTM preference for the tunnel types is as follows:

- `ROUTE_PREF_RSVP` 7
- `ROUTE_PREF_SR_TE` 8
- `ROUTE_PREF_LDP` 9
- `ROUTE_PREF_OSPF_TTM` 10
- `ROUTE_PREF_ISIS_TTM` 11
- `ROUTE_PREF_BGP_TTM` 12
- `ROUTE_PREF_GRE` 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more instances of that protocol programmed a tunnel for the same prefix. The selection of a SR tunnel in this case is based on the lowest preference IGP instance. In the case of a tie, the instance with the lowest metric SR tunnel is selected over the lowest numbered IGP instance.

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	11
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standard-multi-instance *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	configure router <i>named-item-64</i> isis <i>number</i> standard-multi-instance <i>boolean</i>
Tree	standard-multi-instance
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-adjacency-check *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	configure router <i>named-item-64</i> isis <i>number</i> strict-adjacency-check <i>boolean</i>
Tree	strict-adjacency-check
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

summary-address [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **summary-address** list instance

Context **configure** [router](#) *named-item-64* [isis](#) *number* [summary-address](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [summary-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix for the summary address

Context **configure** [router](#) *named-item-64* [isis](#) *number* [summary-address](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [summary-address](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-unreachable

Synopsis Enable the **advertise-unreachable** context

Context **configure** [router](#) *named-item-64* [isis](#) *number* [summary-address](#) (*ipv4-prefix* | *ipv6-prefix*) [advertise-unreachable](#)

Tree [advertise-unreachable](#)

Description Commands in this context enable Unreachable Prefix Announcements (UPAs) for summary member routes. A UPA is advertised for IPv4 and IPv6 summary member prefixes when a summary member prefix suddenly becomes unreachable. By default, all summary member prefixes are monitored for reachability.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-route-tag *number*

Synopsis Route tag to advertise in UPA

Context **configure** [router](#) *named-item-64* [isis](#) *number* [summary-address](#) (*ipv4-prefix* | *ipv6-prefix*) [advertise-unreachable](#) [advertise-route-tag](#) *number*

Tree	advertise-route-tag
Description	This command configures a UPA route tag to add to the advertised UPA. The UPA route tag can be used when there are multiple Autonomous System Boundary Routers (ASBRs) redistributing prefixes between two Interior Gateway Protocol (IGP) areas.
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match-route-tag *number*

Synopsis	Route tag to match UPA
Context	configure router <i>named-item-64</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise-unreachable match-route-tag <i>number</i>
Tree	match-route-tag
Description	This command specifies the route tag to be used (by the router) as the basis to select a subset of summary member prefixes to monitor for reachability.
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level-capability *keyword*

Synopsis	IS-IS level for the summary address
Context	configure router <i>named-item-64</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	configure router <i>named-item-64</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-tag <i>number</i>
Tree	route-tag

Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-attached-bit *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> suppress-attached-bit <i>boolean</i>
Tree	suppress-attached-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *system-id*



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

Synopsis	System ID
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> system-id <i>system-id</i>
Tree	system-id
String length	14
String format	'system-id' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Default	0000.0000.0000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enter the timers context
Context	configure <i>router</i> <i>named-item-64</i> <i>isis</i> <i>number</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-wait

Synopsis	Enter the lsp-wait context
Context	configure router <i>named-item-64</i> isis <i>number</i> timers lsp-wait
Tree	lsp-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-initial-wait *number*

Synopsis	Initial LSP generation delay
Context	configure router <i>named-item-64</i> isis <i>number</i> timers lsp-wait lsp-initial-wait <i>number</i>
Tree	lsp-initial-wait
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-max-wait *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	configure router <i>named-item-64</i> isis <i>number</i> timers lsp-wait lsp-max-wait <i>number</i>
Tree	lsp-max-wait
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-second-wait *number*

Synopsis	Delay between first and second LSP generation
Context	configure router <i>named-item-64</i> isis <i>number</i> timers lsp-wait lsp-second-wait <i>number</i>
Tree	lsp-second-wait

Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>named-item-64</i> isis <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	configure router <i>named-item-64</i> isis <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	configure router <i>named-item-64</i> isis <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

spf-second-wait *number*

Synopsis Hold time between first and second SPF calculations

Context **configure** [router](#) *named-item-64* [isis](#) *number* [timers](#) [spf-wait](#) **spf-second-wait** *number*

Tree [spf-second-wait](#)

Range 10 to 100000

Units milliseconds

Default 1000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

traffic-engineering *boolean*

Synopsis Enable traffic engineering for the router

Context **configure** [router](#) *named-item-64* [isis](#) *number* [traffic-engineering](#) *boolean*

Tree [traffic-engineering](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

traffic-engineering-options

Synopsis Enter the **traffic-engineering-options** context

Context **configure** [router](#) *named-item-64* [isis](#) *number* [traffic-engineering-options](#)

Tree [traffic-engineering-options](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-delay *boolean*

Synopsis Enable the advertisement of link delay for TE

Context **configure** [router](#) *named-item-64* [isis](#) *number* [traffic-engineering-options](#) [advertise-delay](#) *boolean*

Tree	advertise-delay
Description	<p>When configured to true, the router advertises link delay in the IGP LSDB within legacy Traffic Engineering (TE) attributes in IS-IS or within the Application-Specific Link Attribute (ASLA) when ASLA is enabled for SR-TE or RSVP-TE applications.</p> <p>When the application-link-attributes legacy command is configured for SR-TE or RSVP-TE, link delay is advertised as a legacy TE TLV with the ASLA legacy bit set.</p> <p>When configured to false, the router disables link delay advertisement.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

application-link-attributes

Synopsis	Enable the application-link-attributes context
Context	configure router <i>named-item-64</i> isis <i>number</i> traffic-engineering-options application-link-attributes
Tree	application-link-attributes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

legacy *boolean*

Synopsis	Advertise legacy TE attributes
Context	configure router <i>named-item-64</i> isis <i>number</i> traffic-engineering-options application-link-attributes legacy <i>boolean</i>
Tree	legacy
Description	<p>When configured to true, the router supports the legacy mode of advertising TE attributes.</p> <p>When configured to false, legacy mode is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Advertise IS-IS IPv6 Traffic Engineering
Context	configure router <i>named-item-64</i> isis <i>number</i> traffic-engineering-options ipv6 <i>boolean</i>

Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-import

Synopsis	Enter the unicast-import context
Context	configure router <i>named-item-64</i> isis <i>number</i> unicast-import
Tree	unicast-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Submit IPv4 routes into unicast RTM
Context	configure router <i>named-item-64</i> isis <i>number</i> unicast-import ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Submit IPv6 routes into unicast RTM
Context	configure router <i>named-item-64</i> isis <i>number</i> unicast-import ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp

Synopsis	Enable the ldp context
Context	configure router <i>named-item-64</i> ldp

Tree	ldp
Description	Commands in this context configure LDP command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of LDP
Context	configure router <i>named-item-64</i> ldp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate-prefix-match

Synopsis	Enable the aggregate-prefix-match context
Context	configure router <i>named-item-64</i> ldp aggregate-prefix-match
Tree	aggregate-prefix-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LDP aggregate prefix match
Context	configure router <i>named-item-64</i> ldp aggregate-prefix-match admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-exclude *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	configure router <i>named-item-64</i> ldp aggregate-prefix-match prefix-exclude <i>reference</i>
Tree	prefix-exclude
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

consider-system-ip-in-gep *boolean*

Synopsis	Apply global export policy for system IP FEC creation
Context	configure router <i>named-item-64</i> ldp consider-system-ip-in-gep <i>boolean</i>
Tree	consider-system-ip-in-gep
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label-capability *boolean*

Synopsis	Enable entropy label capability on the LDP instance
Context	configure router <i>named-item-64</i> ldp entropy-label-capability <i>boolean</i>
Tree	entropy-label-capability
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policies to determine routes exported to LDP
Context	configure router <i>named-item-64</i> ldp export-policy <i>reference</i>
Tree	export-policy

Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-tunnel-table *reference*

Synopsis	Tunnel table export policies to export tunneled routes
Context	configure router <i>named-item-64</i> ldp export-tunnel-table <i>reference</i>
Tree	export-tunnel-table
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-reroute

Synopsis	Enable the fast-reroute context
Context	configure router <i>named-item-64</i> ldp fast-reroute
Tree	fast-reroute
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-sr-tunnel *boolean*

Synopsis	Use SR tunnel as a remote LFA backup tunnel next-hop by an LDP FEC
Context	configure router <i>named-item-64</i> ldp fast-reroute backup-sr-tunnel <i>boolean</i>
Tree	backup-sr-tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-originate [[fec-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the fec-originate list instance
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-originate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fec-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Static FEC IP prefix
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-originate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-label *number*

Synopsis	Label that is advertised to upstream peer
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertised-label <i>number</i>
Tree	advertised-label
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *named-item-or-empty*

Synopsis	Interface name for this static FEC prefix
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) interface <i>named-item-or-empty</i>
Tree	interface
String length	0 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the next hop
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pop *boolean*

Synopsis	Pop the label and transmit without the label
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pop <i>boolean</i>
Tree	pop
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

swap-label *number*

Synopsis	Value mapped to egress label associated with next-hop entry that LSR uses to swap incoming label
Context	configure router <i>named-item-64</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) swap-label <i>number</i>
Tree	swap-label
Range	6 to 1048575
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enter the **graceful-restart** context

Context **configure** [router](#) *named-item-64* [ldp graceful-restart](#)

Tree [graceful-restart](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

helper-mode *boolean*

Synopsis Enable graceful restart helper

Context **configure** [router](#) *named-item-64* [ldp graceful-restart helper-mode](#) *boolean*

Tree [helper-mode](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

maximum-recovery-time *number*

Synopsis Value for the local maximum recovery time

Context **configure** [router](#) *named-item-64* [ldp graceful-restart maximum-recovery-time](#) *number*

Tree [maximum-recovery-time](#)

Range 15 to 1800

Units seconds

Default 120

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

neighbor-liveness-time *number*

Synopsis Value for the neighbor liveness timer

Context **configure** [router](#) *named-item-64* [ldp graceful-restart neighbor-liveness-time](#) *number*

Tree [neighbor-liveness-time](#)

Range	5 to 300
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

implicit-null-label *boolean*

Synopsis	Signal the implicit null label value for all LDP FECs for which the node is the egress LER
Context	configure router <i>named-item-64</i> ldp implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-pmsi-routes

Synopsis	Enter the import-pmsi-routes context
Context	configure router <i>named-item-64</i> ldp import-pmsi-routes
Tree	import-pmsi-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	configure router <i>named-item-64</i> ldp import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-tunnel-table *reference*

Synopsis	Tunnel table import policies for non-host prefixes
Context	configure router <i>named-item-64</i> ldp import-tunnel-table <i>reference</i>
Tree	import-tunnel-table
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-parameters

Synopsis	Enter the interface-parameters context
Context	configure router <i>named-item-64</i> ldp interface-parameters
Tree	interface-parameters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[ip-int-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-int-name] *reference*

Synopsis	Interface name
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i>
Tree	interface
Reference	configure router <i>named-item-64</i> interface <i>interface-name</i>
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Allow BFD tracking of IPv4 LDP Session for interface
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enable the ipv4 context
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Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-type-capability

Synopsis	Enter the fec-type-capability context
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 fec-type-capability
Tree	fec-type-capability
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-ipv4 *boolean*

Synopsis	Enable IPv4 prefix FEC capability
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 fec-type-capability prefix-ipv4 <i>boolean</i>
Tree	prefix-ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello

Synopsis	Enable the hello context
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 hello
Tree	hello
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor *number*

Synopsis	Factor value for Hello
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 keepalive
Tree	keepalive
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

factor number

Synopsis Factor value for keepalive

Context **configure** [router](#) [named-item-64](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [keepalive](#) [factor](#) [number](#)

Tree [factor](#)

Range 1 to 255

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

timeout number

Synopsis Time that LDP waits before tearing down session

Context **configure** [router](#) [named-item-64](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [keepalive](#) [timeout](#) [number](#)

Tree [timeout](#)

Range 3 to 65535

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

local-lsr-id

Synopsis Enter the **local-lsr-id** context

Context **configure** [router](#) [named-item-64](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [local-lsr-id](#)

Tree [local-lsr-id](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interface-name reference

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP

Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 local-lsr-id interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>named-item-64</i> interface <i>interface-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> ipv4 transport-address <i>keyword</i>
Tree	transport-address
Options	interface, system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load balancing weight for the LDP interface
Context	configure router <i>named-item-64</i> ldp interface-parameters interface <i>reference</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> ldp interface-parameters ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello

Synopsis	Enter the hello context
Context	configure router <i>named-item-64</i> ldp interface-parameters ipv4 hello
Tree	hello
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor *number*

Synopsis	Value for the Hello factor
Context	configure router <i>named-item-64</i> ldp interface-parameters ipv4 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>named-item-64</i> ldp interface-parameters ipv4 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>named-item-64</i> ldp interface-parameters ipv4 keepalive
Tree	keepalive
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

factor *number*

Synopsis Value for the keep-alive factor

Context **configure** [router](#) *named-item-64* [ldp interface-parameters ipv4 keepalive factor](#) *number*

Tree [factor](#)

Range 1 to 255

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

timeout *number*

Synopsis Timeout value for keepalive

Context **configure** [router](#) *named-item-64* [ldp interface-parameters ipv4 keepalive timeout](#) *number*

Tree [timeout](#)

Range 3 to 65535

Units seconds

Default 30

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transport-address *keyword*

Synopsis Transport address to set up the LDP TCP sessions

Context **configure** [router](#) *named-item-64* [ldp interface-parameters ipv4 transport-address](#) *keyword*

Tree [transport-address](#)

Options interface, system

Default system

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

label-withdrawal-delay *number*

Synopsis	Time interval during which LDP delays for the withdrawal of FEC-label binding
Context	configure router <i>named-item-64</i> ldp label-withdrawal-delay <i>number</i>
Tree	label-withdrawal-delay
Range	3 to 120
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-shortcut

Synopsis	Enter the ldp-shortcut context
Context	configure router <i>named-item-64</i> ldp ldp-shortcut
Tree	ldp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Forward IPv4 packets by using LDP shortcuts
Context	configure router <i>named-item-64</i> ldp ldp-shortcut ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

legacy-ipv4-lsr-interop *boolean*

Synopsis	Allow interoperability with legacy IPv4 LSR implementations
Context	configure router <i>named-item-64</i> ldp legacy-ipv4-lsr-interop <i>boolean</i>
Tree	legacy-ipv4-lsr-interop
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-bfd [[prefix-list](#)] *reference*

Synopsis	Enter the lsp-bfd list instance
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i>
Tree	lsp-bfd
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-list] *reference*

Synopsis	Name of a router policy options prefix list
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i>
Tree	lsp-bfd
Reference	configure policy-options prefix-list <i>named-item-64</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD on LDP LSPs for FECs matching prefix list
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template *reference*

Synopsis	BFD sessions template associated with the prefix list
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i> bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>named-item</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failure-action *keyword*

Synopsis	Reaction to BFD session failure for the prefix list
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i> failure-action <i>keyword</i>
Tree	failure-action
Options	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ping-interval (*number* | *keyword*)

Synopsis	LSP ping transmit interval for periodic verification
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i> lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Prefix list to control the search order
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i> priority <i>number</i>
Tree	priority
Range	1 to 99
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Source address in LSP ping and BFD control packets
Context	configure router <i>named-item-64</i> ldp lsp-bfd <i>reference</i> source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-ecmp-routes *number*

Synopsis	Maximum ECMP value for LDP
Context	configure router <i>named-item-64</i> ldp max-ecmp-routes <i>number</i>
Tree	max-ecmp-routes
Description	<p>This command sets the maximum number of ECMP routes that LDP may use to resolve the next hop for a FEC as permitted by the RTM or TTM.</p> <p>The system-wide maximum number of ECMP routes is set by the configure router ecmp command; therefore, the operational maximum number used by LDP is set to the lesser of the values configured by this command and the configure router ecmp command.</p>
Range	1 to 128
Default	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-protocol-stitching *boolean*

Synopsis	Stitch LDP ILM to SR NHLFE even if LDP NHLFE exists
Context	configure router <i>named-item-64</i> ldp prefer-protocol-stitching <i>boolean</i>
Tree	prefer-protocol-stitching
Description	<p>When configured to true, an LDP ILM stitches to an SR NHLFE, even if an LDP NHLFE exists.</p> <p>When configured to false, the stitching preference of an LDP ILM is to an LDP NHLFE.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-tunnel-in-tunnel *boolean*

Synopsis	Preference tunnel-in-tunnel over a simple LDP tunnel
Context	configure router <i>named-item-64</i> ldp prefer-tunnel-in-tunnel <i>boolean</i>
Tree	prefer-tunnel-in-tunnel
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

session-parameters

Synopsis	Enter the session-parameters context
Context	configure router <i>named-item-64</i> ldp session-parameters
Tree	session-parameters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the peer list instance
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the LDP peer
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-adj-addr-only *boolean*

Synopsis	Distribute only the local addresses used to establish the Hello adjacencies with a peer
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) adv-adj-addr-only <i>boolean</i>
Tree	adv-adj-addr-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-local-lsr-id *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) adv-local-lsr-id <i>boolean</i>
Tree	adv-local-lsr-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *policy-string*

Synopsis	Community string associated with a session to a specified peer
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community <i>policy-string</i>
Tree	community
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dod-label-distribution *boolean*

Synopsis	Use LDP Downstream-on-Demand (DoD) label distribution procedures
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) dod-label-distribution <i>boolean</i>

Tree	dod-label-distribution
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-addresses *reference*

Synopsis	Export policies to determine which local addresses should be distributed to this peer
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) export-addresses <i>reference</i>
Tree	export-addresses
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-prefixes *reference*

Synopsis	Export policies to determine which FEC prefixes are redistributed to LDP and TLDP peers
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) export-prefixes <i>reference</i>
Tree	export-prefixes
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fec-limit

Synopsis	Enter the fec-limit context
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Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fec-limit
Tree	fec-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Maximum number of FECs to be accepted from this peer LSR
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fec-limit limit <i>number</i>
Tree	limit
Range	0 1 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Trap and syslog message to generate when reaching the threshold and limit
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fec-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold that generates trap and warning when reached
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fec-limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fec-type-capability

Synopsis Enter the **fec-type-capability** context

Context **configure** [router](#) *named-item-64* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec-type-capability](#)

Tree [fec-type-capability](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability for the session

Context **configure** [router](#) *named-item-64* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec-type-capability prefix-ipv4](#) *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fec129-cisco-interop *boolean*

Synopsis Allow translation between non-compliant FEC 129 formats of Cisco

Context **configure** [router](#) *named-item-64* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec129-cisco-interop](#) *boolean*

Tree [fec129-cisco-interop](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

import-prefixes *reference*

Synopsis FEC prefixes to be redistributed to this LDP peer

Context **configure** [router](#) *named-item-64* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [import-prefixes](#) *reference*

Tree	import-prefixes
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pe-id-mac-flush-interop *boolean*

Synopsis	Send PE-ID TLV in LDP MAC withdrawal message
Context	configure router <i>named-item-64</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) pe-id-mac-flush-interop <i>boolean</i>
Tree	pe-id-mac-flush-interop
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	configure router <i>named-item-64</i> ldp shortcut-local-ttl-propagate <i>boolean</i>
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

shortcut-transit-ttl-propagate *boolean*

Synopsis	Enable TTL propagation over LSP shortcut
Context	configure router <i>named-item-64</i> ldp shortcut-transit-ttl-propagate <i>boolean</i>
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

targeted-session

Synopsis	Enter the targeted-session context
Context	configure router <i>named-item-64</i> ldp targeted-session
Tree	targeted-session
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-rx

Synopsis	Enter the auto-rx context
Context	configure router <i>named-item-64</i> ldp targeted-session auto-rx
Tree	auto-rx
Description	Commands in this context specify the LDP session configuration to accept targeted Hello messages from any peer.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> ldp targeted-session auto-rx ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	configure router <i>named-item-64</i> ldp targeted-session auto-rx ipv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	configure router <i>named-item-64</i> ldp targeted-session auto-rx ipv4 tunneling <i>boolean</i>
Tree	tunneling
Description	<p>When configured to true, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the auto-rx and auto-tx contexts are both administratively enabled, this command must be set to true for LDP rLFA to function properly.</p> <p>When configured to false, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-tx

Synopsis	Enter the auto-tx context
Context	configure router <i>named-item-64</i> ldp targeted-session auto-tx
Tree	auto-tx
Description	Commands in this context specify the LDP session configuration to send targeted Hello messages toward PQ nodes determined by the rLFA algorithm.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> ldp targeted-session auto-tx ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	configure router <i>named-item-64</i> ldp targeted-session auto-tx ipv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	configure router <i>named-item-64</i> ldp targeted-session auto-tx ipv4 tunneling <i>boolean</i>
Tree	tunneling
Description	<p>When configured to true, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the auto-rx context is administratively disabled, this command should be set to true for LDP rLFA to function properly.</p> <p>When configured to false, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-prefixes *reference*

Synopsis	Export route policy to determine which routes are exported to this targeted LDP session
Context	configure router <i>named-item-64</i> ldp targeted-session export-prefixes <i>reference</i>
Tree	export-prefixes
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

import-prefixes *reference*

Synopsis Import route policy to determine which routes are accepted from targeted LDP neighbors

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [import-prefixes](#) *reference*

Tree [import-prefixes](#)

Reference **configure** [policy-options](#) [policy-statement](#) *named-item-64*

Max. instances 5

Notes This element is ordered by the user.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4

Synopsis Enter the **ipv4** context

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [ipv4](#)

Tree [ipv4](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello

Synopsis Enter the **hello** context

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [ipv4](#) [hello](#)

Tree [hello](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

factor *number*

Synopsis Factor value for Hello

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [ipv4](#) [hello](#) [factor](#) *number*

Tree [factor](#)

Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>named-item-64</i> ldp targeted-session ipv4 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Default	45
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-reduction

Synopsis	Enter the hello-reduction context
Context	configure router <i>named-item-64</i> ldp targeted-session ipv4 hello-reduction
Tree	hello-reduction
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>named-item-64</i> ldp targeted-session ipv4 hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor number

Synopsis	Hello reduction dampening factor
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>ipv4</i> <i>hello-reduction</i> <i>factor</i> <i>number</i>
Tree	<i>factor</i>
Range	3 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive

Synopsis	Enter the keepalive context
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>ipv4</i> <i>keepalive</i>
Tree	<i>keepalive</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor number

Synopsis	Factor value for keepalive
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>ipv4</i> <i>keepalive</i> <i>factor</i> <i>number</i>
Tree	<i>factor</i>
Range	1 to 255
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Timeout value for keepalive
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>ipv4</i> <i>keepalive</i> <i>timeout</i> <i>number</i>
Tree	<i>timeout</i>
Range	3 to 65535
Units	seconds

Default	40
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Enter the peer list instance
Context	configure router <i>named-item-64</i> ldp targeted-session peer <i>(ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the LDP peer
Context	configure router <i>named-item-64</i> ldp targeted-session peer <i>(ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LDP peer
Context	configure router <i>named-item-64</i> ldp targeted-session peer <i>(ipv4-address-no-zone ipv6-address-no-zone)</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD tracking of LDP session for the peer
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello

Synopsis	Enable the hello context
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello
Tree	hello
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor *number*

Synopsis	Factor value for Hello
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535

Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-reduction

Synopsis	Enable the hello-reduction context
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction
Tree	hello-reduction
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive

Synopsis	Enable the keepalive context
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Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive
Tree	keepalive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor number

Synopsis	Factor value for keepalive
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Time that LDP waits before tearing down session
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-lsr-id
Tree	local-lsr-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

format-32bit *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-lsr-id format-32bit <i>boolean</i>
Tree	format-32bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-lsr-id interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>named-item-64</i> interface <i>interface-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunneling

Synopsis	Enable the tunneling context
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling
Tree	tunneling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp [[lsp-name](#)] *named-item-64*

Synopsis	Add a list entry for lsp
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling lsp <i>named-item-64</i>
Tree	lsp

Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lsp-name] *named-item-64*

Synopsis	LSP name
Context	configure router <i>named-item-64</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling lsp <i>named-item-64</i>
Tree	lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-template [**template-name**] *named-item*

Synopsis	Enter the peer-template list instance
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i>
Tree	peer-template
Max. instances	500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[template-name] *named-item*

Synopsis	Name for the targeted peer template
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i>
Tree	peer-template
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the peer template

Context **configure** **router** *named-item-64* **ldp** **targeted-session** **peer-template** *named-item* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adv-local-lsr-id *boolean*

Synopsis Advertise local LSR ID over a specified LDP session

Context **configure** **router** *named-item-64* **ldp** **targeted-session** **peer-template** *named-item* **adv-local-lsr-id** *boolean*

Tree **adv-local-lsr-id**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis Enable BFD tracking of T-LDP peer session

Context **configure** **router** *named-item-64* **ldp** **targeted-session** **peer-template** *named-item* **bfd-liveness** *boolean*

Tree **bfd-liveness**

Description When configured to **true**, the router uses BFD to track the selected T-LDP session. By enabling BFD for a selected targeted session, the state of that session is tied to the state of the underneath BFD session between the two nodes.

The command options used for the BFD are configured under the IP interface.

When configured to **false**, the router does not use the central BFD session to track the T-LDP session operational state.

On the 7705 SAR Gen 2, BFD is supported only for IPv4 T-LDP sessions.

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

community *policy-string*

Synopsis Community string associated with a session to a specified peer
Context **configure** [router](#) *named-item-64* [ldp targeted-session peer-template](#) *named-item* [community](#) *policy-string*
Tree [community](#)
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

hello

Synopsis Enable the **hello** context
Context **configure** [router](#) *named-item-64* [ldp targeted-session peer-template](#) *named-item* [hello](#)
Tree [hello](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

factor *number*

Synopsis Factor value for Hello
Context **configure** [router](#) *named-item-64* [ldp targeted-session peer-template](#) *named-item* [hello](#) [factor](#) *number*
Tree [factor](#)
Range 1 to 255
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

Synopsis Timeout value for Hello

Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>peer-template</i> <i>named-item</i> <i>hello</i> <i>timeout</i> <i>number</i>
Tree	<i>timeout</i>
Range	3 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-reduction

Synopsis	Enable the hello-reduction context
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>peer-template</i> <i>named-item</i> <i>hello-reduction</i>
Tree	<i>hello-reduction</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>peer-template</i> <i>named-item</i> <i>hello-reduction</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure <i>router</i> <i>named-item-64</i> <i>ldp</i> <i>targeted-session</i> <i>peer-template</i> <i>named-item</i> <i>hello-reduction</i> <i>factor</i> <i>number</i>
Tree	<i>factor</i>
Range	3 to 20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i> keepalive
Tree	keepalive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

factor number

Synopsis	Factor value for keepalive
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i> keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Time that LDP waits before tearing down session
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i> keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i> local-lsr-id
Tree	local-lsr-id

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

interface-name *reference*

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [peer-template](#) *named-item* [local-lsr-id](#) [interface-name](#) *reference*

Tree [interface-name](#)

Reference **configure** [router](#) *named-item-64* [interface](#) *interface-name*

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

tunneling *boolean*

Synopsis Allow LDP over tunnels

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [peer-template](#) *named-item* [tunneling](#) *boolean*

Tree [tunneling](#)

Default false

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

peer-template-map [[template-map-name](#)] *reference*

Synopsis Enter the **peer-template-map** list instance

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [peer-template-map](#) *reference*

Tree [peer-template-map](#)

Max. instances 500

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[template-map-name] reference

Synopsis	Name to identify the targeted peer template
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template-map <i>reference</i>
Tree	peer-template-map
Reference	configure router <i>named-item-64</i> ldp targeted-session peer-template <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map reference

Synopsis	Targeted peer template to apply to the given policies
Context	configure router <i>named-item-64</i> ldp targeted-session peer-template-map <i>reference</i> policy-map <i>reference</i>
Tree	policy-map
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolve-v6-prefix-over-shortcut boolean

Synopsis	Resolve IPv6 prefix over IGP shortcuts
Context	configure router <i>named-item-64</i> ldp targeted-session resolve-v6-prefix-over-shortcut <i>boolean</i>
Tree	resolve-v6-prefix-over-shortcut
Description	When configured to true , the system enables the resolution of IPv6 LDP unicast prefix FECs over IGP shortcuts. When configured to false , the resolution is not allowed.
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sdp-auto-targeted-session *boolean*

Synopsis Allow auto-creation of targeted sessions by SDP

Context **configure** [router](#) *named-item-64* [ldp](#) [targeted-session](#) [sdp-auto-targeted-session](#) *boolean*

Tree [sdp-auto-targeted-session](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tcp-session-parameters

Synopsis Enter the **tcp-session-parameters** context

Context **configure** [router](#) *named-item-64* [ldp](#) [tcp-session-parameters](#)

Tree [tcp-session-parameters](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis Authentication key between LDP peers

Context **configure** [router](#) *named-item-64* [ldp](#) [tcp-session-parameters](#) [authentication-key](#) *encrypted-leaf*

Tree [authentication-key](#)

Description This command specifies the authentication key used to establish a session between LDP peers.

Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.

The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Authentication keychain to use for the TCP session
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command configures the authentication keychain to use for the TCP session. The per-peer authentication configuration takes precedence over the global authentication configuration.
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-transport [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer-transport list instance
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-transport
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IP address of the TCP connection to the LDP peer
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-transport
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

authentication-key encrypted-leaf

Synopsis	Authentication key between LDP peers
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) authentication-key encrypted-leaf
Tree	authentication-key
Description	<p>This command specifies the authentication key used to establish a session between LDP peers.</p> <p>Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.</p> <p>The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain reference

Synopsis	Authentication keychain to use for the TCP session
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) authentication-keychain reference
Tree	authentication-keychain
Description	<p>This command configures the authentication keychain to use for the TCP session.</p> <p>The per-peer authentication configuration takes precedence over the global authentication configuration.</p>
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis	Allow Path MTU Discovery for associated TCP connections
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	configure router <i>named-item-64</i> ldp tcp-session-parameters peer-transport (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ttl-security <i>number</i>
Tree	ttl-security
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-down-damp-time *number*

Synopsis	Time interval for an LDP to damp a tunnel down event before posting to the Route Table Manager (RTM)
Context	configure router <i>named-item-64</i> ldp tunnel-down-damp-time <i>number</i>
Tree	tunnel-down-damp-time
Range	0 to 20
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-table-pref *number*

Synopsis	Tunnel table preference value for address FECs
Context	configure router <i>named-item-64</i> ldp tunnel-table-pref <i>number</i>

Tree	tunnel-table-pref
Description	<p>This command configures the tunnel table preference for an LDP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Allow weighted ECMP load-balancing
Context	configure router <i>named-item-64</i> ldp weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, the system allows weighted ECMP on LDP using RSVP LSPs or SR-TE LSPs. LDP labeled packets are sprayed across the RSVP or SR-TE LSP ECMP set in proportion to the configured load-balancing weight of LSPs.</p> <p>When configured to false, the system removes weighted ECMP load-balancing.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-export

Synopsis	Enter the leak-export context
Context	configure router <i>named-item-64</i> leak-export
Tree	leak-export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-export-limit *number*

Synopsis	Maximum limit on number of GRT routes leaked into VPRNs
Context	configure router <i>named-item-64</i> leak-export leak-export-limit <i>number</i>
Tree	leak-export-limit
Range	1 to 10000
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure router <i>named-item-64</i> leak-export policy-name (<i>policy-expr-string</i> <i>string</i>)
Tree	policy-name
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-bfd

Synopsis	Enter the lsp-bfd context
Context	configure router <i>named-item-64</i> lsp-bfd
Tree	lsp-bfd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-sessions *number*

Synopsis	Maximum number of LSP BFD session tail-ends
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Context	configure router <i>named-item-64</i> lsp-bfd bfd-sessions <i>number</i>
Tree	bfd-sessions
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tail-end

Synopsis	Enter the tail-end context
Context	configure router <i>named-item-64</i> lsp-bfd tail-end
Tree	tail-end
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Missed message threshold before session is set to down
Context	configure router <i>named-item-64</i> lsp-bfd tail-end multiplier <i>number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

receive-interval *number*

Synopsis	BFD receive interval for LSP tail-end
Context	configure router <i>named-item-64</i> lsp-bfd tail-end receive-interval <i>number</i>
Tree	receive-interval
Range	100 to 1000
Units	milliseconds
Default	1000
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	BFD transmit interval for LSP tail-end
Context	configure <i>router</i> <i>named-item-64</i> <i>lsp-bfd</i> <i>tail-end</i> <i>transmit-interval</i> <i>number</i>
Tree	<i>transmit-interval</i>
Range	100 to 1000
Units	milliseconds
Default	1000
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mc-maximum-routes

Synopsis	Enter the mc-maximum-routes context
Context	configure <i>router</i> <i>named-item-64</i> <i>mc-maximum-routes</i>
Tree	<i>mc-maximum-routes</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Log and allow learning of new multicast routes
Context	configure <i>router</i> <i>named-item-64</i> <i>mc-maximum-routes</i> <i>log-only</i> <i>boolean</i>
Tree	<i>log-only</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	configure <i>router</i> <i>named-item-64</i> <i>mc-maximum-routes</i> <i>threshold</i> <i>number</i>
Tree	<i>threshold</i>
Range	1 to 100
Units	percent

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	configure <i>router</i> <i>named-item-64</i> <i>mc-maximum-routes</i> <i>value</i> <i>number</i>
Tree	<i>value</i>
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld

Synopsis	Enable the mld context
Context	configure <i>router</i> <i>named-item-64</i> <i>mld</i>
Tree	<i>mld</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	configure <i>router</i> <i>named-item-64</i> <i>mld</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-if-query-source-address *ipv6-unicast-or-linklocal-address*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	configure <i>router</i> <i>named-item-64</i> <i>mld</i> <i>group-if-query-source-address</i> <i>ipv6-unicast-or-linklocal-address</i>

Tree	group-if-query-source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [\[ip-interface-name\]](#) *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-interface-name] *interface-name*

Synopsis	IP interface name
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy to filter MLD packets
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Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources

Range	1 to 1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
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Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> ssm-translate
Tree	ssm-translate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range **start** *ipv6-multicast-address* **end** *ipv6-multicast-address*

Synopsis	Enter the group-range list instance
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv6-multicast-address*

Synopsis	Lower bound of the group range
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv6-multicast-address*

Synopsis	Upper bound of the group range
Context	configure <i>router</i> <i>named-item-64</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [*source-address*] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure <i>router</i> <i>named-item-64</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	<i>source</i>
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
Context	configure <i>router</i> <i>named-item-64</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	<i>source</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure <i>router</i> <i>named-item-64</i> mld interface <i>interface-name</i> static

Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-address](#)] *ipv6-multicast-address*

Synopsis	Enter the group list instance
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-address] *ipv6-multicast-address*

Synopsis	Group address of multicast channel
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i>
Tree	group
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
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Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address* [step](#) *ipv6-address*

Synopsis	Enter the group-range list instance
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv6-multicast-address*

Synopsis	Lower bound of the static multicast group
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv6-multicast-address*

Synopsis	Upper bound of the static multicast group
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

step *ipv6-address*

Synopsis	Step interval for the group-range addresses
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
MD-CLI default	::1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [**source-address**] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure router <i>named-item-64</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
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Context	configure <i>router</i> <i>named-item-64</i> mld <i>interface</i> <i>interface-name</i> static <i>group-range</i> start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure <i>router</i> <i>named-item-64</i> mld <i>interface</i> <i>interface-name</i> static <i>group-range</i> start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	MLD protocol version
Context	configure <i>router</i> <i>named-item-64</i> mld <i>interface</i> <i>interface-name</i> version <i>keyword</i>
Tree	version
Options	1, 2
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure <i>router</i> <i>named-item-64</i> mld query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds

Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>named-item-64</i> mld query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>named-item-64</i> mld query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure router <i>named-item-64</i> mld robust-count <i>number</i>
Tree	robust-count
Range	2 to 10
Default	2
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ssm-translate

Synopsis Enter the **ssm-translate** context

Context **configure** [router](#) *named-item-64* [mld](#) [ssm-translate](#)

Tree [ssm-translate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-range [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address*

Synopsis Enter the **group-range** list instance

Context **configure** [router](#) *named-item-64* [mld](#) [ssm-translate](#) [group-range](#) [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address*

Tree [group-range](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[start](#) *ipv6-multicast-address*

Synopsis Lower bound of the group range

Context **configure** [router](#) *named-item-64* [mld](#) [ssm-translate](#) [group-range](#) [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[end](#) *ipv6-multicast-address*

Synopsis Upper bound of the group range

Context **configure** [router](#) *named-item-64* [mld](#) [ssm-translate](#) [group-range](#) [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure router <i>named-item-64</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
Context	configure router <i>named-item-64</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls

Synopsis	Enable the mpls context
Context	configure router <i>named-item-64</i> mpls
Tree	mpls
Description	Commands in this context configure MPLS.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group-frr *boolean*

Synopsis	Use admin group constraints for FRR path computation
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Context	configure router <i>named-item-64</i> mpls admin-group-frr <i>boolean</i>
Tree	admin-group-frr
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MPLS instance
Context	configure router <i>named-item-64</i> mpls admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-bandwidth-multipliers

Synopsis	Enter the auto-bandwidth-multipliers context
Context	configure router <i>named-item-64</i> mpls auto-bandwidth-multipliers
Tree	auto-bandwidth-multipliers
Description	Commands in this context configure the multipliers for the auto-bandwidth adjustment.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjust-multiplier *number*

Synopsis	Collection intervals in an adjust interval
Context	configure router <i>named-item-64</i> mpls auto-bandwidth-multipliers adjust-multiplier <i>number</i>
Tree	adjust-multiplier
Range	1 to 16383
Default	288
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sample-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	configure router <i>named-item-64</i> mpls auto-bandwidth-multipliers sample-multiplier <i>number</i>
Tree	sample-multiplier
Range	1 to 511
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-lsp [[template-name](#)] *reference*

Synopsis	Enter the auto-lsp list instance
Context	configure router <i>named-item-64</i> mpls auto-lsp <i>reference</i>
Tree	auto-lsp
Max. instances	500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[template-name] *reference*

Synopsis	LSP template name
Context	configure router <i>named-item-64</i> mpls auto-lsp <i>reference</i>
Tree	auto-lsp
Reference	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-hop *boolean*

Synopsis	Enable one-hop point-to-point LSP automatic signaling
Context	configure router <i>named-item-64</i> mpls auto-lsp <i>reference</i> one-hop <i>boolean</i>

Tree	one-hop
Description	This command enables the automatic signaling of one-hop point-to-point LSPs.
Default	false
Notes	The following elements are part of a choice: one-hop or policy .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	Peer prefix policy name
Context	configure router <i>named-item-64</i> mpls auto-lsp <i>reference</i> policy <i>reference</i>
Tree	policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	The following elements are part of a choice: one-hop or policy . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bypass-resignal-timer number

Synopsis	Resignal timer for bypass
Context	configure router <i>named-item-64</i> mpls bypass-resignal-timer <i>number</i>
Tree	bypass-resignal-timer
Range	1 to 10080
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cspf-on-loose-hop boolean

Synopsis	Calculate CSPF until next loose hop on LSR
Context	configure router <i>named-item-64</i> mpls cspf-on-loose-hop <i>boolean</i>
Tree	cspf-on-loose-hop

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-bypass *boolean*

Synopsis	Create dynamic bypass LSPs in FRR
Context	configure router <i>named-item-64</i> mpls dynamic-bypass <i>boolean</i>
Tree	dynamic-bypass
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enter the entropy-label context
Context	configure router <i>named-item-64</i> mpls entropy-label
Tree	entropy-label
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te *boolean*

Synopsis	Apply entropy labels to RSVP-TE LSPs
Context	configure router <i>named-item-64</i> mpls entropy-label rsvp-te <i>boolean</i>
Tree	rsvp-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Apply entropy labels to SR-TE LSPs
Context	configure router <i>named-item-64</i> mpls entropy-label sr-te <i>boolean</i>
Tree	sr-te
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

exponential-backoff-retry *boolean*

Synopsis Use exponential back-off timer when retrying an LSP

Context **configure** [router](#) *named-item-64* [mpls](#) **exponential-backoff-retry** *boolean*

Tree [exponential-backoff-retry](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

forwarding-policies

Synopsis Enable the **forwarding-policies** context

Context **configure** [router](#) *named-item-64* [mpls](#) **forwarding-policies**

Tree [forwarding-policies](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of MPLS forwarding policies

Context **configure** [router](#) *named-item-64* [mpls](#) **forwarding-policies** **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

forwarding-policy [[policy-name](#)] *named-item-64*

Synopsis Enter the **forwarding-policy** list instance

Context **configure** [router](#) *named-item-64* [mpls](#) **forwarding-policies** **forwarding-policy** *named-item-64*

Tree [forwarding-policy](#)

Max. instances	65536
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policy-name] *named-item-64*

Synopsis	Forwarding policy name
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i>
Tree	forwarding-policy
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MPLS forwarding policy
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

binding-label *number*



WARNING:

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

Synopsis	Binding label
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> binding-label <i>number</i>

Tree	binding-label
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> egress-statistics
Tree	egress-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress-statistics

Synopsis	Enable the ingress-statistics context
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> ingress-statistics
Tree	ingress-statistics
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> ingress-statistics admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Metric of an MPLS forwarding policy
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-group [*index*] *number*

Synopsis	Enter the next-hop-group list instance
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i>
Tree	next-hop-group
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index for next hop group
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i>

Tree	next-hop-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of NHG in MPLS forwarding policy
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-next-hop

Synopsis	Enable the backup-next-hop context
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> backup-next-hop
Tree	backup-next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Next hop address
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> backup-next-hop next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pushed-labels [\[index\]](#) *number*

Synopsis	Enter the pushed-labels list instance
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> backup-next-hop pushed-labels <i>number</i>
Tree	pushed-labels
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index for push label
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> backup-next-hop pushed-labels <i>number</i>
Tree	pushed-labels
Range	1 to 10
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> backup-next-hop pushed-labels <i>number</i> label <i>number</i>
Tree	label
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-next-hop

Synopsis	Enable the primary-next-hop context
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Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> primary-next-hop
Tree	primary-next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Next hop address
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> primary-next-hop next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pushed-labels [[index](#)] *number*

Synopsis	Enter the pushed-labels list instance
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> primary-next-hop pushed-labels <i>number</i>
Tree	pushed-labels
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index for push label
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> primary-next-hop pushed-labels <i>number</i>
Tree	pushed-labels
Range	1 to 10
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> primary-next-hop pushed-labels <i>number</i> label <i>number</i>
Tree	label
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-type *keyword***WARNING:**

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

Synopsis	Resolution type for next hop group
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> next-hop-group <i>number</i> resolution-type <i>keyword</i>
Tree	resolution-type
Options	direct, indirect
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number***WARNING:**

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

Synopsis	Preference number
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> preference <i>number</i>
Tree	preference
Range	1 to 255

Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-timer *number*

Synopsis	Revert timer
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> revert-timer <i>number</i>
Tree	revert-timer
Range	1 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-table-pref *number*

Synopsis	Tunnel table preference
Context	configure router <i>named-item-64</i> mpls forwarding-policies forwarding-policy <i>named-item-64</i> tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the TTM preference value of an MPLS forwarding policy. It is used by applications to select one tunnel type to bind to in TTM when multiple tunnel types are enabled for the application.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reserved-label-block *reference*



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

Synopsis	Reserved label block
Context	configure router <i>named-item-64</i> mpls forwarding-policies reserved-label-block <i>reference</i>
Tree	reserved-label-block
Reference	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frr-object *boolean*

Synopsis	Signal with fast reroute object
Context	configure router <i>named-item-64</i> mpls frr-object <i>boolean</i>
Tree	frr-object
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-timer *number*

Synopsis	Hold timer value
Context	configure router <i>named-item-64</i> mpls hold-timer <i>number</i>
Tree	hold-timer
Range	0 to 1000
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i>
Tree	interface
Description	Commands in this context configure the attributes for MPLS protocol support on an IP interface.

MPLS commands are not executed on an IP interface where MPLS is not enabled. An MPLS interface must be explicitly enabled (admin-state enabled).

The MPLS interface must be admin-state disabled to delete the interface definition.

A corresponding RSVP interface must also be configured. The MPLS interface cannot be deleted without also deleting the RSVP interface.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[interface-name] reference

Synopsis Router interface name
Context **configure** [router](#) *named-item-64* [mpls interface reference](#)
Tree [interface](#)
Reference **configure** [router](#) *named-item-64* [interface](#) *interface-name*
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-group reference

Synopsis Administrative groups supported by the interface
Context **configure** [router](#) *named-item-64* [mpls interface reference](#) [admin-group reference](#)
Tree [admin-group](#)
Description This command specifies the administrative groups that the interface supports.
This information is advertised as part of OSPF and IS-IS to help CSPF compute constrained LSPs that must include or exclude certain administrative groups. An MPLS interface is assumed to belong to all the administrative groups unless this command is issued under the interface configuration. With this command configured, the interface is assumed to belong to only the groups specifically configured in this command.
Only the administrative groups bound to an MPLS interface are advertised in TE link TLVs and sub-TLVs when the **traffic-engineering** option is enabled in IS-IS or OSPF. IES and VPRN interfaces do not have their attributes advertised in TE TLVs.
Reference **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *named-item*
Max. instances 32
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MPLS interface
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-map [[in-label](#)] *number*

Synopsis	Enter the label-map list instance
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i>
Tree	label-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[in-label] *number*

Synopsis	Match the incoming MPLS label
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i>
Tree	label-map
Range	32 to 1048575
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the label map
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pop

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

Synopsis	Pop (remove) the incoming label and forward packet based on service header
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i> pop
Tree	pop
Notes	The following elements are part of a choice: pop or swap .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

swap

Synopsis	Enable the swap context
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i> swap
Tree	swap
Notes	The following elements are part of a choice: pop or swap .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop *ipv4-unicast-address*

Synopsis	IP address for the next hop
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i> swap next-hop <i>ipv4-unicast-address</i>
Tree	next-hop
String format	'ipv4-address' must use only digits and dots (no %zone)

	'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-label (*number* | *keyword*)

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> label-map <i>number</i> swap out-label (<i>number</i> <i>keyword</i>)
Tree	out-label
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg-group [[name](#)] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> srlg-group <i>reference</i>
Tree	srlg-group
Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *reference*

Synopsis	Shared Risk Link Group (SRLG) name
Context	configure router <i>named-item-64</i> mpls interface <i>reference</i> srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

te-metric *number*

Synopsis TE metric for the interface

Context **configure** [router](#) *named-item-64* [mpls](#) [interface](#) *reference* **te-metric** *number*

Tree [te-metric](#)

Range 1 to 16777215

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

least-fill-min-thd *number*

Synopsis Percentage of the least fill minimum threshold value

Context **configure** [router](#) *named-item-64* [mpls](#) [least-fill-min-thd](#) *number*

Tree [least-fill-min-thd](#)

Range 0 to 100

Units percent

Default 5

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

least-fill-reoptim-thd *number*

Synopsis Percentage of the least fill reoptimization threshold value

Context **configure** [router](#) *named-item-64* [mpls](#) [least-fill-reoptim-thd](#) *number*

Tree [least-fill-reoptim-thd](#)

Range 0 to 100

Units percent

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

logger-event-bundling *boolean***WARNING:**

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

Synopsis	Merge and bundle MPLS traps
Context	configure router <i>named-item-64</i> mpls logger-event-bundling <i>boolean</i>
Tree	logger-event-bundling
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp [[lsp-name](#)] *named-item-64*

Synopsis	Enter the lsp list instance
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i>
Tree	lsp
Description	<p>Commands in this context create or configure an LSP that is either signaled dynamically by the router, or is a statically provisioned MPLS-TP LSP.</p> <p>Use the to command to specify the egress router. At least one primary or secondary path (for signaled LSPs or at least one working path for MPL-TP LSPs) must be specified when the LSP is created. All other statements under the LSP hierarchy are optional.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lsp-name] *named-item-64*

Synopsis	Labeled Switch path name
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i>
Tree	lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> adaptive <i>boolean</i>
Tree	adaptive
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-tag [*name*] *reference*

Synopsis	Add a list entry for admin-tag
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> admin-tag <i>reference</i>
Tree	admin-tag
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *reference*

Synopsis	Name of the admin tags
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> admin-tag <i>reference</i>
Tree	admin-tag
Reference	configure routing-options admin-tags admin-tag <i>string</i>

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adspec *boolean*

Synopsis	Include ADSPEC object in RSVP messages
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> adspec <i>boolean</i>
Tree	adspec
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on LSPs. These commands apply to BFD on RSVP LSPs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD on the LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , the system enables LSP BFD on the LSP. LSP BFD must also be configured under the configure router context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template. When configured to false , the system disables LSP BFD on the LSP. This command applies to BFD on RSVP LSPs.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failure-action *keyword*

Synopsis	Action when LSP BFD fails
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bfd failure-action <i>keyword</i>
Tree	failure-action
Description	This command specifies the action when LSP BFD fails on a LSP. Regardless of the failure action specified, when the BFD session goes down on the LSP, the system generates an SNMP trap.
Options	none, down, failover, failover-or-down
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ping-interval (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bfd lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	This command configures the time to wait for BFD to become operationally up. For RSVP-TE LSPs, the timer controls the following: <ul style="list-style-type: none">• a path undergoing MBB when BFD is up• the initial administrative state of the LSP• the retry signaling of non-standby secondary paths
Range	1 to 60
Units	seconds
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-shortcut *boolean*

Synopsis	Include LSP for BGP routes
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bgp-shortcut <i>boolean</i>
Tree	bgp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-transport-tunnel *boolean*

Synopsis	Include LSP as transport LSP for labeled BGP routes
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> bgp-transport-tunnel <i>boolean</i>
Tree	bgp-transport-tunnel
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

binding-sid *number*

Synopsis	Binding SID for the LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> binding-sid <i>number</i>
Tree	binding-sid
Description	This command binds a label to the LSP. The label value must belong to the reserved label block that is configured with the configure router mpls lsp-bsid-block command.
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type *number*

Synopsis	Class type for an LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *keyword*

Synopsis	Entropy label
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> entropy-label <i>keyword</i>
Tree	entropy-label
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-admin-group *reference*

Synopsis	Name of admin group excluded when LSP is set up
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> exclude-admin-group <i>reference</i>

Tree	exclude-admin-group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	Exclude Routers object to be included in the bypass path message
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> exclude-node (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	exclude-node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fallback-path-computation-method *keyword*

Synopsis	Fallback path computation method
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> fallback-path-computation-method <i>keyword</i>
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-reroute

Synopsis	Enable the fast-reroute context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> fast-reroute
Tree	fast-reroute
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frr-method *keyword*

Synopsis	Fast Reroute method
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> fast-reroute frr-method <i>keyword</i>
Tree	frr-method
Options	one-to-one, facility
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> fast-reroute hop-limit <i>number</i>
Tree	hop-limit
Range	0 to 255
Default	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> fast-reroute node-protect <i>boolean</i>
Tree	node-protect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> fast-reroute propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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



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

Synopsis	Source IP address of this LSP
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp</i> <i>named-item-64</i> from (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	from
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop-limit *number*

Synopsis	Maximum number of hops that an LSP can traverse including ingress and egress routers
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp</i> <i>named-item-64</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp</i> <i>named-item-64</i> igp-shortcut
Tree	igp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-sr-over-srte *boolean*

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	When configured to true , the router performs the local SPF and the SR-TE LSP is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lfa-type *keyword*

Synopsis	LSP usage in LFA SPF
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> igp-shortcut lfa-type <i>keyword</i>
Tree	lfa-type
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relative-metric *number*

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> igp-shortcut relative-metric <i>number</i>
Tree	relative-metric
Range	-10 to 10
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-admin-group *reference*

Synopsis	Admin group name included when LSP is set up
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> include-admin-group <i>reference</i>
Tree	include-admin-group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-stack-reduction *boolean*

Synopsis	Enable label compression for LSP path
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> label-stack-reduction <i>boolean</i>
Tree	label-stack-reduction
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-over-rsvp *boolean*

Synopsis	Include this LSP in LDP over RSVP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> ldp-over-rsvp <i>boolean</i>

Tree	ldp-over-rsvp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

least-fill *boolean*

Synopsis	Enable least-fill path selection for this LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> least-fill <i>boolean</i>
Tree	least-fill
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load balancing weight for an MPLS LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-sr-protection *keyword*

Synopsis	Local SR protection preference for LSP path computation
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> local-sr-protection <i>keyword</i>
Tree	local-sr-protection
Options	none, preferred, mandatory
Default	preferred
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

main-ct-retry-limit *number*

Synopsis	Maximum number of retries before reverting to backup CT
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Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> main-ct-retry-limit <i>number</i>
Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sr-labels

Synopsis	Enter the max-sr-labels context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> max-sr-labels
Tree	max-sr-labels
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-frr-labels *number*

Synopsis	Value for the maximum additional overhead labels
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> max-sr-labels additional-frr-labels <i>number</i>
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-stack-size *number*

Synopsis	Maximum label stack size
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> max-sr-labels label-stack-size <i>number</i>
Tree	label-stack-size
Description	This command configures the maximum label stack size of the primary path of the SR-TE LSP.
Range	1 to 11
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric number

Synopsis	LSP metric that forces to a constant value
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> metric number
Tree	metric
Description	<p>This command allows the user to override the LSP operational metric with a constant administrative value that does not change regardless of the actual path the LSP uses over its lifetime.</p> <p>The LSP operational metric matches the metric that the active path of this LSP uses at any specific time. For a CSPF LSP, this metric represents the cumulative IGP metric of all links the active path uses. If CSPF for this LSP is configured to use the TE metric, the LSP operational metric is set to the maximum value. For a non-CSPF LSP, the operational metric is the shortest IGP cost to the destination of the LSP.</p> <p>The LSP operational metric is used by some applications to select an LSP among a set of LSPs that are destined to the same egress router. The LSP with the lowest operational metric is selected. If more than one LSP has the same lowest LSP metric, the LSP with the lowest tunnel index is selected. The configuration of a constant metric by the user ensures that the LSP always maintains its preference in this selection regardless of the path it uses at any given time. Applications that use the LSP operational metric include LDP-over-RSVP, VPRN auto-bind, IGP, BGP, and static route shortcuts.</p> <p>This command and the use-computed-metric command are mutually exclusive.</p>
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-type keyword

Synopsis	Metric type used for LSP path computation
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> metric-type keyword
Tree	metric-type
Options	igp, te, delay
Default	igp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-tunnel-elc boolean

Synopsis	Override any received entropy label capability
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Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> override-tunnel-elc <i>boolean</i>
Tree	override-tunnel-elc
Description	When configured to true , this command allows the system to override any received entropy label capability advertisement. When configured to false , this command disables the override.
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

path-computation-method *keyword*

Synopsis	Path computation method
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> path-computation-method <i>keyword</i>
Tree	path-computation-method
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP. See "SR-TE LSP path computation using hop-to-label translation" in the <i>7705 SAR Gen 2 Segment Routing and PCE User Guide</i> for more information.
Options	local-cspf, pce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-profile [*profile-id*] *number*

Synopsis	Enter the path-profile list instance
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> path-profile <i>number</i>
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[profile-id] number

Synopsis	Profile ID for the specified LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> path-profile <i>number</i>
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-group number

Synopsis	Path-group ID for the specified LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> path-profile <i>number</i> path-group <i>number</i>
Tree	path-group
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-associations

Synopsis	Enter the pce-associations context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diversity [diversity-name] reference

Synopsis	Add a list entry for diversity
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> pce-associations diversity <i>reference</i>

Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[diversity-name] reference

Synopsis	Name of the PCE association configured under the PCC
Context	configure router named-item-64 mpls lsp named-item-64 pce-associations diversity reference
Tree	diversity
Reference	configure router named-item-64 pcep pcc pce-associations diversity named-item
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy [policy-name] reference

Synopsis	Add a list entry for policy
Context	configure router named-item-64 mpls lsp named-item-64 pce-associations policy reference
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policy-name] reference

Synopsis	Name of the PCE association configured under the PCC
Context	configure router named-item-64 mpls lsp named-item-64 pce-associations policy reference

Tree	policy
Reference	configure router <i>named-item-64</i> pcep pcc pce-associations policy <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-control *boolean*

Synopsis	Enable PCE controlled LSP mode of operation
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> pce-control <i>boolean</i>
Tree	pce-control
Description	<p>When configured to true, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to false, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-report *keyword*

Synopsis	Global configuration of reporting to PCE to override
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> pce-report <i>keyword</i>
Tree	pce-report
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary [[path-name](#)] *reference*

Synopsis	Enter the primary list instance
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i>
Tree	primary

Description	<p>Commands in this context configure a preferred path for the LSP. This command is optional only if the secondary path name is included in the LSP definition. Only one primary path can be defined for an LSP.</p> <p>Some attributes of the LSP, such as the bandwidth and hop-limit can be optionally specified as the attributes of the primary path. The attributes specified in this command override the LSP attributes.</p>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[path-name] reference

Synopsis	Path name
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i>
Tree	primary
Reference	configure router <i>named-item-64</i> mpls path <i>named-item-64</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptive boolean

Synopsis	Enable make-before-break functionality
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> adaptive <i>boolean</i>
Tree	adaptive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the LSP path
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-class-type *number*

Synopsis	Class-type for the LSP or LSP path
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> backup-class-type <i>number</i>
Tree	backup-class-type
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Units	megabps
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD (S-BFD) on SR-TE LSPs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary reference bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, LSP BFD is enabled on the RSVP LSP or S-BFD is enabled for the SR-TE LSP.</p> <p>LSP BFD must also be configured under the configure router context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template.</p> <p>When configured to false, LSP BFD is disabled on the RSVP LSP or S-BFD on the SR-TE LSP.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary reference bfd bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ping-interval (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary reference bfd lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Units	seconds
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type *number*

Synopsis	Class-type
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-metric-limit *number*

Synopsis	Delay metric limit
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary reference delay-metric-limit <i>number</i>
Tree	delay-metric-limit
Description	<p>This command configures the upper limit of the delay metric used by the local CSPF in the LSP path computation. The computation uses this configuration value only if the metric type is configured to delay in the configure router mpls lsp metric-type context.</p> <p>If the configured metric type is delay and this command is not configured, the computation selects the lowest latency path.</p>
Range	1 to 16777215
Units	microseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-admin-group

Synopsis	Enable the exclude-admin-group context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary reference exclude-admin-group
Tree	exclude-admin-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary reference exclude-admin-group group <i>reference</i>
Tree	group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Min. instances	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

hop-limit *number*

Synopsis Total number of hops that an LSP traverses

Context **configure** [router](#) *named-item-64* [mpls lsp](#) *named-item-64* [primary](#) *reference* [hop-limit](#) *number*

Tree [hop-limit](#)

Range 2 to 255

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

include-admin-group

Synopsis Enable the **include-admin-group** context

Context **configure** [router](#) *named-item-64* [mpls lsp](#) *named-item-64* [primary](#) *reference* [include-admin-group](#)

Tree [include-admin-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group *reference*

Synopsis Groups that are included when LSP path is setup

Context **configure** [router](#) *named-item-64* [mpls lsp](#) *named-item-64* [primary](#) *reference* [include-admin-group](#) [group](#) *reference*

Tree [group](#)

Reference **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *named-item*

Max. instances 32

Min. instances 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority

Synopsis	Enter the priority context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> priority
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> primary <i>reference</i> record <i>boolean</i>
Tree	record

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router named-item-64 mpls lsp named-item-64 primary reference record-label <i>boolean</i>
Tree	record-label
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate-admin-group *boolean*

Synopsis	Enable admin groups via session attribute object
Context	configure router named-item-64 mpls lsp named-item-64 propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-limit *number*

Synopsis	Number of attempts to re-establish LSP after it fails
Context	configure router named-item-64 mpls lsp named-item-64 retry-limit <i>number</i>
Tree	retry-limit
Range	1 to 10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-timer *number*

Synopsis	Time for LSP re-establishment attempts after failure
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Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 600
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-timer *number*

Synopsis	Revert timer for the LSP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> revert-timer <i>number</i>
Tree	revert-timer
Range	1 to 4320
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-resv-style *keyword*

Synopsis	Reservation style for RSVP
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> rsvp-resv-style <i>keyword</i>
Tree	rsvp-resv-style
Options	se, ff
Default	se
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary [[path-name](#)] *reference*

Synopsis	Enter the secondary list instance
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i>
Tree	secondary
Description	Commands in this context configure an alternative path that the LSP uses if the primary path is not available. This command is optional and is not required when the configure router mpls lsp primary command is specified. After the switchover from the primary

to the secondary, the system continuously tries to revert to the primary path. The switch back to the primary path is based on the retry-timer interval.

The system does not switch among secondary paths. The system starts the signaling (RSVP-TE) or programming (SR-TE) of all non-standby secondary paths at the same time. Retry counters are maintained for each unsuccessful attempt. After the retry limit is reached on a path, the system does not attempt to signal the path and administratively disables the path. The first successfully established non-standby secondary path is made the active path for the LSP.

For RSVP-TE LSPs, up to eight secondary paths can be specified (or seven if a primary is configured). For SR-TE LSPs, up to three paths of any type (with a maximum of one primary) can be configured. By default, a secondary path is non-standby unless the **standby** keyword is configured. All non-standby secondary paths are considered equal, and the first available path is used.

Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[path-name] reference

Synopsis	Path name
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary reference
Tree	secondary
Reference	configure router <i>named-item-64</i> mpls path <i>named-item-64</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptive boolean

Synopsis	Enable make-before-break functionality
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary reference adaptive boolean
Tree	adaptive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LSP path
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Units	megabps
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD (S-BFD) on SR-TE LSPs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
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Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary reference bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, LSP BFD is enabled on the RSVP LSP or S-BFD is enabled for the SR-TE LSP.</p> <p>LSP BFD must also be configured under the configure router context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template.</p> <p>When configured to false, LSP BFD is disabled on the RSVP LSP or S-BFD on the SR-TE LSP.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary reference bfd bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ping-interval (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary reference bfd lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none">• a path undergoing MBB when BFD is up• the initial administrative state of the LSP• the retry signaling of non-standby secondary paths
Range	1 to 60
Units	seconds
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type *number*

Synopsis	Class-type
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-metric-limit *number*

Synopsis	Delay metric limit
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> delay-metric-limit <i>number</i>

Tree	delay-metric-limit
Description	<p>This command configures the upper limit of the delay metric used by the local CSPF in the LSP path computation. The computation uses this configuration value only if the metric type is configured to delay in the configure router mpls lsp metric-type context.</p> <p>If the configured metric type is delay and this command is not configured, the computation selects the lowest latency path.</p>
Range	1 to 16777215
Units	microseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-admin-group

Synopsis	Enable the exclude-admin-group context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> exclude-admin-group
Tree	exclude-admin-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group reference

Synopsis	Groups to exclude when the LSP path is setup
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> exclude-admin-group group <i>reference</i>
Tree	group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> include-admin-group
Tree	include-admin-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> include-admin-group group <i>reference</i>
Tree	group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-preference *number*

Synopsis	Path preference for the secondary standby path
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Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> path-preference <i>number</i>
Tree	path-preference
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority

Synopsis	Enter the priority context
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> priority
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> secondary <i>reference</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

record *boolean*

Synopsis Enable recording of all hops that an LSP path traverses

Context **configure** [router](#) *named-item-64* [mpls lsp](#) *named-item-64* [secondary](#) *reference* **record** *boolean*

Tree [record](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

record-label *boolean*

Synopsis Enable recording of labels at each node or instance

Context **configure** [router](#) *named-item-64* [mpls lsp](#) *named-item-64* [secondary](#) *reference* **record-label** *boolean*

Tree [record-label](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

srlg *boolean*

Synopsis Use SRLG constraint in secondary path computation for an LSP at the head-end LER

Context **configure** [router](#) *named-item-64* [mpls lsp](#) *named-item-64* [secondary](#) *reference* **srlg** *boolean*

Tree [srlg](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

standby *boolean*

Synopsis Keep secondary path indefinitely in hot standby state

Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp</i> <i>named-item-64</i> <i>secondary</i> <i>reference</i> <i>standby</i> <i>boolean</i>
Tree	<i>standby</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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



WARNING:

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

Synopsis	Destination IP address or the egress router for the LSP
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp</i> <i>named-item-64</i> to (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	to
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*



WARNING:

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

Synopsis	LSP for bypass protection, point to multipoint, segment routing or MPLS-TP static LSP
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp</i> <i>named-item-64</i> type <i>keyword</i>
Tree	type
Options	p2p-rsvp, p2p-static-mpls, p2p-rsvp-bypass, p2mp-rsvp, p2mp-rsvp-auto, p2p-rsvp-mesh, p2p-rsvp-one-hop, p2p-sr-te, p2p-sr-te-mesh, p2p-sr-te-one-hop, p2p-sr-te-pce-init, p2p-sr-te-on-demand, p2p-rsvp-member
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-computed-metric *boolean*

Synopsis	Use the computed metric for the path in the TTM
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> use-computed-metric <i>boolean</i>
Tree	use-computed-metric
Description	<p>When configured to true, the router populates the TTM with the LSP metric as returned by the local CSPF or the PCE when metric-type is set to te or delay. This operational metric value is used instead of the default value of 16677215.</p> <p>When configured to false, the router does not populate the TTM with the LSP metric returned by the local CSPF or the PCE.</p> <p>This command and the metric command are mutually exclusive.</p>
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

vprn-auto-bind *boolean*

Synopsis	Include this LSP in auto-bind for VPRN services
Context	configure router <i>named-item-64</i> mpls lsp <i>named-item-64</i> vprn-auto-bind <i>boolean</i>
Tree	vprn-auto-bind
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-bsid-block *reference***WARNING:**

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

Synopsis	Reserved label block for binding SIDs
Context	configure router <i>named-item-64</i> mpls lsp-bsid-block <i>reference</i>
Tree	lsp-bsid-block
Description	This command references a pre-existing reserved label block for statically configured binding SIDs.
Reference	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lsp-history

Synopsis Enable the **lsp-history** context

Context **configure** [router](#) *named-item-64* [mpls](#) [lsp-history](#)

Tree [lsp-history](#)

Description Commands in this context control the recording of LSP history events.

When the context is deleted, memory is deallocated.

When the context is created, memory is allocated for storing up to 100 of the most recent RSVP and SR-TE LSP history events.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of LSP history recording

Context **configure** [router](#) *named-item-64* [mpls](#) [lsp-history](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lsp-init-retry-timeout *number*

Synopsis LSP initial retry timeout

Context **configure** [router](#) *named-item-64* [mpls](#) [lsp-init-retry-timeout](#) *number*

Tree [lsp-init-retry-timeout](#)

Range 10 to 600

Units seconds

Default 30

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lsp-template [*template-name*] *named-item*

Synopsis	Enter the lsp-template list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> lsp-template <i>named-item</i>
Tree	lsp-template
Description	Commands in this context configure the attributes of an LSP template that can be referenced by a client application when dynamic LSPs must be created.
Max. instances	4096
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[template-name] *named-item*

Synopsis	LSP template name
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> lsp-template <i>named-item</i>
Tree	lsp-template
Description	This command specifies the name of the LSP template. An LSP template name and LSP name must not be the same.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptive *boolean***WARNING:**

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

Synopsis	Enable make-before-break functionality
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> lsp-template <i>named-item</i> adaptive <i>boolean</i>
Tree	adaptive
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the LSP template

Context **configure** [router](#) *named-item-64* [mpls](#) [lsp-template](#) *named-item* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-tag [[name](#)] *reference*

Synopsis Add a list entry for **admin-tag**

Context **configure** [router](#) *named-item-64* [mpls](#) [lsp-template](#) *named-item* **admin-tag** *reference*

Tree [admin-tag](#)

Max.
instances 4

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *reference*

Synopsis Name of the admin tags

Context **configure** [router](#) *named-item-64* [mpls](#) [lsp-template](#) *named-item* **admin-tag** *reference*

Tree [admin-tag](#)

Reference **configure** [routing-options](#) [admin-tags](#) **admin-tag** *string*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adspec *boolean***WARNING:**

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

Synopsis	Include ADSPEC objects in RSVP messages
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> adspec <i>boolean</i>
Tree	adspec
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-class-type *number***WARNING:**

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

Synopsis	Backup class type for this LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> backup-class-type <i>number</i>
Tree	backup-class-type
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	Amount of bandwidth reserved for the P2MP instance
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Units	megabps
Default	0

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd



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

Synopsis	Enter the bfd context
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on LSPs. These commands apply to BFD on RSVP LSPs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD on the LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , the system enables LSP BFD on the LSP. LSP BFD must also be configured under the configure router context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template. When configured to false , the system disables LSP BFD on the LSP.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bfd bfd-template <i>reference</i>

Tree	bfd-template
Reference	configure bfd bfd-template <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failure-action *keyword*

Synopsis	Action to take when LSP BFD session fails
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bfd failure-action <i>keyword</i>
Tree	failure-action
Options	none, down, failover-or-down
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-ping-interval (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bfd lsp-ping-interval (<i>number</i> <i>keyword</i>)
Tree	lsp-ping-interval
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-shortcut *boolean*



WARNING:

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

Synopsis	Enable use of RSVP LSP for IPv4 BGP routes
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Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bgp-shortcut <i>boolean</i>
Tree	bgp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-transport-tunnel *boolean*



WARNING:

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

Synopsis	Allow use of RSVP-TE LSP as transport for tunnel routes
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> bgp-transport-tunnel <i>boolean</i>
Tree	bgp-transport-tunnel
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

binding-sid *boolean*



WARNING:

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

Synopsis	Request to allocate and bind a label
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> binding-sid <i>boolean</i>
Tree	binding-sid
Description	<p>When configured to true, the system allocates and binds a label to any LSP that is created using the template.</p> <p>When configured to false, this command removes the configuration but this does not affect LSPs that were already created using the template.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type *number*

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

Synopsis	Class type for an LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-path *reference*

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

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

Synopsis	Default path to be used for signaling LSP instances
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> default-path <i>reference</i>
Tree	default-path
Reference	configure router <i>named-item-64</i> mpls path <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-metric-limit *number*

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

Synopsis	Delay metric limit
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Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>lsp-template</i> <i>named-item</i> delay-metric-limit <i>number</i>
Tree	delay-metric-limit
Description	<p>This command configures the upper limit of the delay metric used by the local CSPF in the LSP path computation. The computation uses this configuration value only if the metric type is configured to delay in the configure router mpls lsp-template metric-type context.</p> <p>If the configured metric type is delay and this command is not configured, the computation selects the lowest latency path.</p>
Range	1 to 16777215
Units	microseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *keyword*



WARNING:

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

Synopsis	Entropy label for an LSP template
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>lsp-template</i> <i>named-item</i> entropy-label <i>keyword</i>
Tree	entropy-label
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-admin-group *reference*



WARNING:

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

Synopsis	Admin group name excluded when LSP is set up
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>lsp-template</i> <i>named-item</i> exclude-admin-group <i>reference</i>
Tree	exclude-admin-group
Reference	configure <i>routing-options</i> <i>if-attribute</i> <i>admin-group</i> <i>named-item</i>

Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fallback-path-computation-method *keyword*



WARNING:

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

Synopsis	Fallback path computation method
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> fallback-path-computation-method <i>keyword</i>
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family *keyword*



WARNING:

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

Synopsis	Address family that specifies template use in SR-TE LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> family <i>keyword</i>
Tree	family
Description	This command specifies the address family for which the LSP template applies in an SR-TE LSP. An LSP template is required for each address family.
Options	ipv4, ipv6
Default	ipv4
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fast-reroute

Synopsis Enable the **fast-reroute** context

Context **configure** [router](#) *named-item-64* [mpls lsp-template](#) *named-item* [fast-reroute](#)

Tree [fast-reroute](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

frr-method *keyword*



WARNING:

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

Synopsis Fast Reroute method for the LSPs that are dynamically created using this LSP template

Context **configure** [router](#) *named-item-64* [mpls lsp-template](#) *named-item* [fast-reroute](#) [frr-method](#) *keyword*

Tree [frr-method](#)

Options one-to-one, facility

Default facility

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hop-limit *number*

Synopsis Total number of hops a detour or backup LSP can take

Context **configure** [router](#) *named-item-64* [mpls lsp-template](#) *named-item* [fast-reroute](#) [hop-limit](#) *number*

Tree [hop-limit](#)

Range 0 to 255

Default 16

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> fast-reroute node-protect <i>boolean</i>
Tree	node-protect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> fast-reroute propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

from (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

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

Synopsis	IP address of the ingress router for the LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> from (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	from
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop-limit *number*

**WARNING:**

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

Synopsis	Maximum hops for an LSP created using this LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-shortcut

**WARNING:**

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

Synopsis	Enter the igp-shortcut context
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> igp-shortcut
Tree	igp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

**WARNING:**

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

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2

Platforms7705 SAR Gen 2

allow-sr-over-srte *boolean*



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

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	When configured to true , the router performs local SPF and the SR-TE LSP template is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command and when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lfa-type *keyword*



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

Synopsis	LSP usage in LFA SPF
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> igp-shortcut lfa-type <i>keyword</i>
Tree	lfa-type
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relative-metric *number*

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

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> igp-shortcut relative-metric <i>number</i>
Tree	relative-metric
Range	-10 to 10
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-admin-group *reference*

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

Synopsis	Admin group name included when LSP is set up
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> include-admin-group <i>reference</i>
Tree	include-admin-group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-stack-reduction *boolean*

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

Synopsis	Enable label compression for LSP path
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Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> label-stack-reduction boolean
Tree	label-stack-reduction
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-over-rsvp *boolean*

**WARNING:**

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

Synopsis	Include this LSP in LDP over RSVP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> ldp-over-rsvp boolean
Tree	ldp-over-rsvp
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

least-fill *boolean*

**WARNING:**

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

Synopsis	Enable least-fill path selection for this LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> least-fill boolean
Tree	least-fill
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

**WARNING:**

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

Synopsis	Load balancing weight for an MPLS LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-sr-protection *keyword*

**WARNING:**

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

Synopsis	Local SR protection preference for LSP path computation
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> local-sr-protection <i>keyword</i>
Tree	local-sr-protection
Options	none, preferred, mandatory
Default	preferred
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

main-ct-retry-limit *number*

**WARNING:**

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

Synopsis	Maximum number of retries before reverting to backup CT
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> main-ct-retry-limit <i>number</i>

Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sr-labels

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

Synopsis	Enter the max-sr-labels context
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> max-sr-labels
Tree	max-sr-labels
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-frr-labels *number*

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

Synopsis	Maximum number of additional overhead labels
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> max-sr-labels additional-frr-labels <i>number</i>
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-stack-size *number*

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

Synopsis	Size for the maximum segment routing label stack
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> max-sr-labels label-stack-size <i>number</i>
Tree	label-stack-size
Range	1 to 11
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*



WARNING:

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

Synopsis	LSP template metric
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> metric <i>number</i>
Tree	metric
Description	<p>This command allows the user to override the LSP operational metric with a constant administrative value that does not change regardless of the actual path the LSP uses over its lifetime.</p> <p>The LSP operational metric matches the metric that the active path of this LSP uses at any specific time. For a CSPF LSP, this metric represents the cumulative IGP metric of all links the active path uses. If CSPF for this LSP is configured to use the TE metric, the LSP operational metric is set to the maximum value. For a non-CSPF LSP, the operational metric is the shortest IGP cost to the destination of the LSP.</p> <p>The LSP operational metric is used by some applications to select an LSP among a set of LSPs that are destined to the same egress router. The LSP with the lowest operational metric is selected. If more than one LSP has the same lowest LSP metric, the LSP with the lowest tunnel index is selected. The configuration of a constant metric by the user ensures that the LSP always maintains its preference in this selection regardless of the path it uses at any given time. Applications that use the LSP operational metric include LDP-over-RSVP, VPRN auto-bind, IGP, BGP, and static route shortcuts.</p> <p>This command and the use-computed-metric command are mutually exclusive.</p>
Range	0 to 16777215
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-type *keyword*

**WARNING:**

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

Synopsis	Metric type used for LSP path computation
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> metric-type <i>keyword</i>
Tree	metric-type
Options	igp, te, delay
Default	igp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-tunnel-elc *boolean*

**WARNING:**

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

Synopsis	Override any received entropy label capability
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> override-tunnel-elc <i>boolean</i>
Tree	override-tunnel-elc
Description	When configured to true , this command allows the system to override any received entropy label capability advertisement. When configured to false , this command disables the override.
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

path-computation-method *keyword*

**WARNING:**

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

Synopsis	Path computation method
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Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> path-computation-method <i>keyword</i>
Tree	path-computation-method
Description	<p>This command configures the path computation method of an RSVP-TE or SR-TE LSP.</p> <p>If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.</p> <p>See "SR-TE LSP path computation using hop-to-label translation" in the <i>7705 SAR Gen 2 Segment Routing and PCE User Guide</i> for more information.</p>
Options	local-cspf, pce
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-profile [**profile-id**] *number*

Synopsis	Enter the path-profile list instance
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> path-profile <i>number</i>
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[profile-id] *number*

Synopsis	Profile ID for the specified LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> path-profile <i>number</i>
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-group *number*

Synopsis	Path-group ID for the specified LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> path-profile <i>number</i> path-group <i>number</i>
Tree	path-group
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-associations**WARNING:**

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

Synopsis	Enter the pce-associations context
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diversity [**diversity-name**] *reference*

Synopsis	Add a list entry for diversity
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> pce-associations diversity <i>reference</i>
Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[diversity-name] reference

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> pce-associations diversity <i>reference</i>
Tree	diversity
Reference	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy [policy-name] reference

Synopsis	Add a list entry for policy
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> pce-associations policy <i>reference</i>
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policy-name] reference

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> pce-associations policy <i>reference</i>
Tree	policy
Reference	configure router <i>named-item-64</i> pcep pcc pce-associations policy <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-control *boolean*



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

Synopsis	Enable PCE controlled LSP mode of operation
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp-template</i> <i>named-item</i> pce-control <i>boolean</i>
Tree	<i>pce-control</i>
Description	<p>When configured to true, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to false, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-report *keyword*



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

Synopsis	Enable reporting modes to PCE for RSVP-TE or SR-TE LSPs
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls lsp-template</i> <i>named-item</i> pce-report <i>keyword</i>
Tree	<i>pce-report</i>
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority



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

Synopsis	Enter the priority context
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> priority
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-priority *number*



WARNING:

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

Synopsis	Hold priority when insufficient bandwidth is available to set up LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

setup-priority *number*



WARNING:

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

Synopsis	Setup priority when insufficient bandwidth is available to set up LSP
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate-admin-group *boolean*

**WARNING:**

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

Synopsis	Enable admin groups via session attribute object
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record *boolean*

**WARNING:**

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

Synopsis	Enable recording of all hops for this LSP template
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record-label *boolean*

**WARNING:**

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

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> record-label <i>boolean</i>
Tree	record-label
Default	true

Introduced25.3.R2

Platforms7705 SAR Gen 2

retry-limit *number*



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

SynopsisNumber of attempts to re-establish LSP after it fails

Context**configure** *router* *named-item-64* *mpls* *lsp-template* *named-item* **retry-limit** *number*

Tree**retry-limit**

Range1 to 10000

Introduced25.3.R2

Platforms7705 SAR Gen 2

retry-timer *number*



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

SynopsisTime for LSP re-establishment attempts after failure

Context**configure** *router* *named-item-64* *mpls* *lsp-template* *named-item* **retry-timer** *number*

Tree**retry-timer**

Range1 to 600

Unitsseconds

Default30

Introduced25.3.R2

Platforms7705 SAR Gen 2

template-id (*number* | *keyword*)



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



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

Synopsis	Template ID
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> template-id (<i>number</i> <i>keyword</i>)
Tree	template-id
Description	This command specifies the value that is signaled in the PCE to identify the LSP template.
Range	1 to 4294967295
Options	default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword



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



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

Synopsis	LSP template type
Context	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i> type <i>keyword</i>
Tree	type
Description	This command configures the type of a template that can be referenced by a client application where dynamic LSP creation is required. The LSP template type is mandatory.
Options	p2mp-rsvp, p2p-rsvp-one-hop, p2p-rsvp-mesh, p2p-sr-te-one-hop, p2p-sr-te-mesh, p2p-sr-te-pce-init, p2p-sr-te-on-demand, p2p-rsvp-member
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-computed-metric *boolean***WARNING:**

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

Synopsis	Use the computed metric for the path in the TTM
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>lsp-template</i> <i>named-item</i> use-computed-metric <i>boolean</i>
Tree	<i>use-computed-metric</i>
Description	<p>When configured to true, the router populates the TTM with the LSP metric as returned by local CSPF or the PCE when metric-type is set to te or delay. This operational metric value is used instead of the default value of 16677215.</p> <p>When configured to false, the router does not populate the TTM with the LSP metric returned by the local CSPF or the PCE.</p> <p>This command and the metric command are mutually exclusive.</p>
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

vprn-auto-bind *boolean***WARNING:**

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

Synopsis	Include LSP template in auto-bind for VPRN services
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>lsp-template</i> <i>named-item</i> vprn-auto-bind <i>boolean</i>
Tree	<i>vprn-auto-bind</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-bypass-associations *number*

Synopsis	Maximum number of LSPs associated with a bypass tunnel
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> max-bypass-associations <i>number</i>
Tree	<i>max-bypass-associations</i>

Range	100 to 131072
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-bypass-plr-associations *number*

Synopsis	Maximum number of PLRs per RSVP-TE bypass LSP
Context	configure router <i>named-item-64</i> mpls max-bypass-plr-associations <i>number</i>
Tree	max-bypass-plr-associations
Range	1 to 16
Default	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbb-prefer-current-hops *boolean*

Synopsis	Select preference to use the current hops for MBB
Context	configure router <i>named-item-64</i> mpls mbb-prefer-current-hops <i>boolean</i>
Tree	mbb-prefer-current-hops
Description	<p>When configured to true, the router instructs CSPF to select an MBB path of a RSVP-TE LSP which has the most overlapping links with the current path.</p> <p>When MPLS performs an MBB for the primary or secondary path of a P2P LSP, or the S2L path of a P2MP LSP, and this command is enabled in the MPLS context, CSPF selects a path, among equal-cost candidate paths, with the most overlapping links with the current path. Normally, CSPF selects the path randomly.</p> <p>The procedures for the MBB CSPF path selection apply to LSP without the least-fill command enabled. If the least-fill rule results in a different path, the LSP path is moved. Users can still favor stability over the least-fill condition by applying a larger value to the least-fill-min-thd command, under the MPLS context, such that a path is only moved when the difference of the least-available bandwidth becomes significant enough between the most used links in the equal-cost paths. If that difference is not significant enough, CSPF selects the path with the most overlapping links instead of selecting a path randomly.</p> <p>The procedures when this command is enabled apply to the following MBB types:</p> <ul style="list-style-type: none"> • RSVP P2P LSP: • global revertive MBB • autobandwidth MBB • configuration change MBB

- soft preemption MBB
- TE graceful shutdown MBB
- delayed retry MBB (for SRLG secondary LSP path)
- path change MBB
- timer resignal MBB
- manual resignal MBB
- S2L path of a RSVP P2MP LSP:
- global revertive MBB
- soft preemption MBB
- TE graceful shutdown MBB

During the FRR global revertive MBB, CSPF selects a random link from those available between the PLR node and the Merge Point node, including the failed link if it has restored in the meantime. These links cannot be checked for overlap with the current path.

The TE graceful shutdown MBB still avoids the link or node that is in maintenance and the soft preemption MBB still avoids the link that is overbooked.

For an inter-area LSP, this feature applies to the subset of the path from the ingress LER to the exit ABR.

The procedures of this feature are not applied to a zero-bandwidth CSPF LSP, including an autobandwidth CSPF LSP while its operational bandwidth is zero, and to a non-CSPF LSP.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

p2p-active-path-fast-retry *number*

Synopsis	Fast retry timer for P2P active paths
Context	configure <i>router</i> <i>named-item-64</i> mpls p2p-active-path-fast-retry <i>number</i>
Tree	p2p-active-path-fast-retry
Range	1 to 10
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path [*path-name*] *named-item-64*

Synopsis	Enter the path list instance
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Context	configure router <i>named-item-64</i> mpls path <i>named-item-64</i>
Tree	path
Max. instances	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[path-name] *named-item-64*

Synopsis	Name for this LSP path
Context	configure router <i>named-item-64</i> mpls path <i>named-item-64</i>
Tree	path
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the path used for LSPs
Context	configure router <i>named-item-64</i> mpls path <i>named-item-64</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hop [**hop-index**] *number*

Synopsis	Enter the hop list instance
Context	configure router <i>named-item-64</i> mpls path <i>named-item-64</i> hop <i>number</i>
Tree	hop
Max. instances	255

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[hop-index] *number*

Synopsis Index to identify a particular hop
 Context **configure** *router* *named-item-64* *mpls path* *named-item-64* *hop* *number*
 Tree *hop*
 Range 1 to 1024
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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



WARNING:

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

Synopsis IP address of the transit router
 Context **configure** *router* *named-item-64* *mpls path* *named-item-64* *hop* *number* *ip-address* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree *ip-address*
 Notes The following elements are part of a mandatory choice: (**ip-address** and **type**) or **sid-label**.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

sid-label *number*

Synopsis MPLS label for tunnel hop in the path of an SR-TE LSP
 Context **configure** *router* *named-item-64* *mpls path* *named-item-64* *hop* *number* *sid-label* *number*
 Tree *sid-label*
 Range 32 to 1048575
 Notes The following elements are part of a mandatory choice: (**ip-address** and **type**) or **sid-label**.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Tunnel hop type
Context	configure router <i>named-item-64</i> mpls path <i>named-item-64</i> hop <i>number</i> type <i>keyword</i>
Tree	type
Options	strict, loose
Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-init-lsp

Synopsis	Enable the pce-init-lsp context
Context	configure router <i>named-item-64</i> mpls pce-init-lsp
Tree	pce-init-lsp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te

Synopsis	Enable the sr-te context
Context	configure router <i>named-item-64</i> mpls pce-init-lsp sr-te
Tree	sr-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of SR-TE PCE-initiated LSP support
Context	configure router <i>named-item-64</i> mpls pce-init-lsp sr-te admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-report

Synopsis	Enter the pce-report context
Context	configure router <i>named-item-64</i> mpls pce-report
Tree	pce-report
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te boolean

Synopsis	Allow PCE reporting for all TE LSPs of RSVP-TE type
Context	configure router <i>named-item-64</i> mpls pce-report rsvp-te <i>boolean</i>
Tree	rsvp-te
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te boolean

Synopsis	Allow PCE reporting for all TE LSPs of SR-TE type
Context	configure router <i>named-item-64</i> mpls pce-report sr-te <i>boolean</i>
Tree	sr-te
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resignal-on-igp-event boolean

Synopsis	Reoptimize RSVP LSP paths upon IGP events
Context	configure router <i>named-item-64</i> mpls resignal-on-igp-event <i>boolean</i>

Tree [resignal-on-igp-event](#)

Description When configured to **true**, the system enables the ad hoc reoptimization of the active CSPF path of all RSVP-TE LSPs at the receipt of an IGP link event. The following link events are supported:

- link down
- link up
- IGP or TE metric change
- SRLG change
- admin group change

The ad hoc reoptimization follows the same behavior as in the timer-based resignal Make-Before-Break (MBB) feature. MPLS reevaluates the active paths of all RSVP-TE LSPs. The reevaluation consists of updating the total IGP or TE metric of the current path, checking the validity of the hops, and computing a new CSPF path. MPLS signals and programs the new path only if its total metric is different than the updated metric of the current path, or if one or more hops of the current path are invalid. Otherwise, the current path is considered to be the most optimal and retained.

This feature does not require that the timer-based resignal (**configure router mpls resignal-timer**) command be enabled. If enabled, the resignal timer is aborted and an ad hoc reoptimization is performed.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

resignal-on-igp-overload *boolean*

Synopsis Resignal all RSVP-TE LSPs upon IGP overload

Context **configure router** *named-item-64* **mpls** [resignal-on-igp-overload](#) *boolean*

Tree [resignal-on-igp-overload](#)

Description When configured to **true**, the receipt of the IS-IS overload bit in the TE-DB triggers the immediate resignaling of all RSVP-TE LSPs. MPLS forces the expiry of the resignal timer and the TE-DB computes a new CSPF for each RSVP-TE LSP active path. The re-optimization causes the immediate transition of RSVP-TE LSP paths away from the IS-IS node in overload using the MBB operation.

This command cannot be configured to **true** when the **retry-on-igp-overload** command is configured to **true**.

When configured to **false**, the default behavior is maintained where MBB re-optimization occurs only when a timer-based resignal is performed or a manual resignal is executed.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

resignal-timer *number*

Synopsis	Resignal timer for RSVP LSPs
Context	configure router <i>named-item-64</i> mpls resignal-timer <i>number</i>
Tree	resignal-timer
Range	30 to 10080
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-on-igp-overload *boolean*

Synopsis	Tear down LSPs when IGP is in overload state
Context	configure router <i>named-item-64</i> mpls retry-on-igp-overload <i>boolean</i>
Tree	retry-on-igp-overload
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary-fast-retry-timer *number*

Synopsis	Fast retry timer for secondary paths
Context	configure router <i>named-item-64</i> mpls secondary-fast-retry-timer <i>number</i>
Tree	secondary-fast-retry-timer
Range	1 to 10
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	configure router <i>named-item-64</i> mpls shortcut-local-ttl-propagate <i>boolean</i>
Tree	shortcut-local-ttl-propagate
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

shortcut-transit-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets for transit packets
Context	configure router <i>named-item-64</i> mpls shortcut-transit-ttl-propagate <i>boolean</i>
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te-resignal

Synopsis	Enter the sr-te-resignal context
Context	configure router <i>named-item-64</i> mpls sr-te-resignal
Tree	sr-te-resignal
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resignal-on-igp-event *boolean*

Synopsis	Reoptimize SR-TE LSPs upon IGP link events
Context	configure router <i>named-item-64</i> mpls sr-te-resignal resignal-on-igp-event <i>boolean</i>
Tree	resignal-on-igp-event
Description	<p>When configured to true, the system enables the ad hoc reoptimization of all CSPF paths in the operational UP state of all SR-TE LSPs at the receipt of an IGP link event. The following link events are supported:</p> <ul style="list-style-type: none"> • link down • link up • IGP or TE metric change • SRLG change • admin group change

The ad hoc reoptimization follows the same behavior as in the timer-based resignal Make-Before-Break (MBB) feature. MPLS reevaluates all the paths in the operational UP state of all SR-TE LSPs. The reevaluation consists of updating the total IGP or TE metric of the current path, checking the validity of the hops and labels, and computing

a new CSPF path. MPLS programs the new path only if its total metric is different than the updated metric of the current path, or if one or more hops or labels of the current path are invalid. Otherwise, the current path is considered to be the most optimal and retained.

This feature does not require that the timer-based resignal (**configure router mpls sr-te-resignal resignal-timer**) command be enabled. If enabled, the resignal timer is aborted and an ad hoc reoptimization is performed.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resignal-on-igp-overload *boolean*

Synopsis	Enable resignaling of SR-TE LSPs upon IGP overload
Context	configure <i>router</i> <i>named-item-64</i> mpls sr-te-resignal resignal-on-igp-overload <i>boolean</i>
Tree	resignal-on-igp-overload
Description	When configured to true , the system enables ad-hoc re-optimization of the CSPF paths of all SR-TE LSPs when IS-IS receives an IS-IS overload bit advertisement from a remote router.

When this command is enabled on the router and an IGP overload bit is set in a Layer 1 or Layer 2 IS-IS LSP received from a remote router, MPLS performs an ad-hoc re-optimization of all the paths of all the SR-TE LSPs that have paths computed by the local CSPF. For each SR-TE LSP current path that transits the router in overload, the CSPF looks for a new path that avoids the router. For each SR-TE LSP current path that terminates on the router in overload, the CSPF checks if a better path exists. In both cases, if a new path is not found the system maintains the current path when operationally up.

The ad-hoc re-optimization triggers the timer-based re-optimization by forcing the resignal timer to expire. Therefore, the user must use the **configure router mpls sr-te-resignal resignal-timer** command to configure the resignal timer for the SR-TE application.

When configured to **false**, MPLS does not act immediately on an IS-IS overload bit from a remote router. MPLS acts on it at the next timer-based or manual re-optimization of the SR-TE LSPs.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resignal-timer *number*

Synopsis	Resignal timer for SR-TE LSPs
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Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>sr-te-resignal</i> <i>resignal-timer</i> <i>number</i>
Tree	resignal-timer
Description	This command configures the time the system waits before signaling the re-optimization of all SR-TE LSPs.
Range	30 to 10080
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srhg-database

Synopsis	Enter the srhg-database context
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>srhg-database</i>
Tree	srhg-database
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id [[router-address](#)] *ipv4-address*

Synopsis	Enter the router-id list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>srhg-database</i> <i>router-id</i> <i>ipv4-address</i>
Tree	router-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[router-address](#)] *ipv4-address*

Synopsis	Router ID for the system
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls</i> <i>srhg-database</i> <i>router-id</i> <i>ipv4-address</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the interface entry
Context	configure router <i>named-item-64</i> mpls srlg-database router-id <i>ipv4-address</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-address](#)] *ipv4-address* [srlg-group](#) *reference*

Synopsis	Add a list entry for interface
Context	configure router <i>named-item-64</i> mpls srlg-database router-id <i>ipv4-address</i> interface <i>ipv4-address</i> srlg-group <i>reference</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-address] *ipv4-address*

Synopsis	IP address of the interface
Context	configure router <i>named-item-64</i> mpls srlg-database router-id <i>ipv4-address</i> interface <i>ipv4-address</i> srlg-group <i>reference</i>
Tree	interface
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg-group *reference*

Synopsis	SRLG group name
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Context	configure router <i>named-item-64</i> mpls srlg-database router-id ipv4-address interface ipv4-address srlg-group <i>reference</i>
Tree	interface
Reference	configure routing-options if-attribute srlg-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg-frr *keyword*

Synopsis	Use of SRLG constraint for FRR path computation
Context	configure router <i>named-item-64</i> mpls srlg-frr <i>keyword</i>
Tree	srlg-frr
Options	loose, strict
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-lsp [[lsp-name](#)] *named-item-64*

Synopsis	Enter the static-lsp list instance
Context	configure router <i>named-item-64</i> mpls static-lsp <i>named-item-64</i>
Tree	static-lsp
Max. instances	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lsp-name] *named-item-64*

Synopsis	Labeled Switch path name
Context	configure router <i>named-item-64</i> mpls static-lsp <i>named-item-64</i>
Tree	static-lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static LSP
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls static-lsp</i> <i>named-item-64</i> admin-state <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*



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

Synopsis	MPLS static LSP metric to select an LSP
Context	configure <i>router</i> <i>named-item-64</i> <i>mpls static-lsp</i> <i>named-item-64</i> metric <i>number</i>
Tree	<i>metric</i>
Description	<p>This command allows the user to override the LSP operational metric with a constant administrative value that does not change regardless of the actual path the LSP uses over its lifetime.</p> <p>The LSP operational metric matches the metric that the active path of this LSP uses at any specific time. For a CSPF LSP, this metric represents the cumulative IGP metric of all links the active path uses. If CSPF for this LSP is configured to use the TE metric, the LSP operational metric is set to the maximum value. For a non-CSPF LSP, the operational metric is the shortest IGP cost to the destination of the LSP.</p> <p>The LSP operational metric is used by some applications to select an LSP among a set of LSPs that are destined to the same egress router. The LSP with the lowest operational metric is selected. If more than one LSP has the same lowest LSP metric, the LSP with the lowest tunnel index is selected. The configuration of a constant metric by the user ensures that the LSP always maintains its preference in this selection regardless of the path it uses at any given time. Applications that use the LSP operational metric include LDP-over-RSVP, VPRN auto-bind, IGP, BGP, and static route shortcuts.</p> <p>This command and the use-computed-metric command are mutually exclusive.</p>
Range	1 to 16777215

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

push

Synopsis	Enable the push context
Context	configure router <i>named-item-64</i> mpls static-lsp <i>named-item-64</i> push
Tree	push
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop *ipv4-unicast-address*

Synopsis	IP address for the next hop
Context	configure router <i>named-item-64</i> mpls static-lsp <i>named-item-64</i> push next-hop <i>ipv4-unicast-address</i>
Tree	next-hop
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

out-label (*number* | *keyword*)

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	configure router <i>named-item-64</i> mpls static-lsp <i>named-item-64</i> push out-label (<i>number</i> <i>keyword</i>)
Tree	out-label
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

to *ipv4-unicast-address***WARNING:**

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

Synopsis	Destination IP address or the egress router for the LSP
Context	configure router <i>named-item-64</i> mpls static-lsp <i>named-item-64</i> to <i>ipv4-unicast-address</i>
Tree	to
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-lsp-fast-retry *number*

Synopsis	Fast retry timer for static LSPs
Context	configure router <i>named-item-64</i> mpls static-lsp-fast-retry <i>number</i>
Tree	static-lsp-fast-retry
Range	1 to 30
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-ero-nhop-direct-resolution *boolean*

Synopsis	Resolves RSVP-TE LSP ERO to local and host routes only
Context	configure router <i>named-item-64</i> mpls strict-ero-nhop-direct-resolution <i>boolean</i>
Tree	strict-ero-nhop-direct-resolution
Description	<p>When configured to true, the router enables the strict Explicit Route Object (ERO) next-hop direct resolution. The feature restricts the routes used to resolve the next hop of an ERO address to local and host routes. This command avoids using a next hop over a parallel link when a half link is up in the routing table.</p> <p>This command applies to an ERO when all of the following conditions are met:</p> <ul style="list-style-type: none"> • the ERO next hop is an IPv4 address • the ERO object is a strict hop

- the IPv4 address matches the primary subnet of a local numbered interface

If no such route exists, RSVP rejects the PATH message with ErrCode = Routing Error (24) and SubErrCode = Bad Strict Node (2).

When configured to **false**, the router disables the strict ERO next-hop direct resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-table-pref

Synopsis	Enter the tunnel-table-pref context
Context	configure router <i>named-item-64</i> mpls tunnel-table-pref
Tree	tunnel-table-pref
Description	Commands in this context configure the tunnel table preference for RSVP-TE LSP and SR-TE LSP tunnel types.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te number

Synopsis	RSVP-TE tunnel table preference
Context	configure router <i>named-item-64</i> mpls tunnel-table-pref rsvp-te <i>number</i>
Tree	rsvp-te
Description	<p>This command configures the tunnel table preference for RSVP-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>Nokia recommends that tunnel types have unique preference values. In a situation where two or more tunnel types are set to the same preference value, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te number

Synopsis	SR-TE tunnel table preference
Context	configure router <i>named-item-64</i> mpls tunnel-table-pref sr-te <i>number</i>
Tree	sr-te
Description	<p>This command configures the tunnel table preference for SR-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-srlg-db boolean

Synopsis	Enable the use of user SRLG database
Context	configure router <i>named-item-64</i> mpls user-srlg-db <i>boolean</i>
Tree	user-srlg-db
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-labels

Synopsis	Enter the mpls-labels context
Context	configure router <i>named-item-64</i> mpls-labels
Tree	mpls-labels
Description	Commands in this context configure global MPLS label parameters for the router.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bgp-labels-hold-timer *number*

Synopsis	BGP labels hold timer for the ingress router
Context	configure router <i>named-item-64</i> mpls-labels bgp-labels-hold-timer <i>number</i>
Tree	bgp-labels-hold-timer
Description	<p>This command configures the number of seconds the IOM retains a BGP per-next-hop label forwarding entry (ILM entry) after BGP determines the label is no longer associated with any best or best-external path. Retaining the entry for a short period allows in-flight traffic bearing the old label to continue forwarding while upstream routers converge to the new label value, enabling MBB behavior during primary path reoptimization.</p> <p>A non-zero delay is useful in the following situations:</p> <ul style="list-style-type: none"> • a label-unicast route is readvertised with a new label by an ABR/ASBR operating in label-per-next-hop mode after it selects a new primary path • an IP VPN route is readvertised with a new label by an ABR/ASBR operating in label-per-next-hop mode after it selects a new primary path • an IP VPN route is readvertised with a new label by a VPRN with best-external enabled when its best-external path changes • an IP VPN route is readvertised with a new label by a VPRN in label-per-next-hop mode after the CE next hop changes <p>In the preceding situations, configure the hold timer to be large enough to account for the propagation delay of the route withdrawal to all ingress routers.</p> <p>This command applies to the Base router BGP instance and all VPRN BGP instances. It affects per-next-hop labels for labeled-IPv4 routes, VPN-IPv4 and VPN-IPv6 routes, including best-external, and LPN-mode VPRN per-CE labels.</p> <p>When set to zero, label forwarding entries are deleted immediately when BGP no longer requires them.</p>
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reserved-label-block [**label-block-name**] *named-item-64*

Synopsis	Enter the reserved-label-block list instance
Context	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Tree	reserved-label-block

Description	Commands in this context configure a block of labels from the dynamic range to be locally assigned for specific applications, such as segment routing adjacency SIDs. The reserved label block is not advertised by the IGP. Note: Changes to the reserved label block range do not impact the actual MPLS datapath table sizes.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[label-block-name] *named-item-64*

Synopsis	Name for the reserved label block
Context	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Tree	reserved-label-block
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-label *number*

Synopsis	Upper bound of the reserved label block range
Context	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i> end-label <i>number</i>
Tree	end-label
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-label *number*

Synopsis	Lower bound of the reserved label block range
Context	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i> start-label <i>number</i>
Tree	start-label

Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-labels

Synopsis	Enter the sr-labels context
Context	configure router <i>named-item-64</i> mpls-labels sr-labels
Tree	sr-labels
Description	<p>Commands in this context configure the range of the Segment Routing Global Block (SRGB), which assigns labels to segment routing prefix SIDs originated by this router. The range is taken from the system dynamic label range and is not instantiated by default.</p> <p>Segment routing labels are reserved labels. After they are instantiated, they cannot be used for dynamic label assignment by other protocols, such as RSVP, LDP, and BGP.</p> <p>Note: Changes to the SRGB range do not impact the actual MPLS datapath table sizes.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the label range
Context	configure router <i>named-item-64</i> mpls-labels sr-labels end number
Tree	end
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of the label range
Context	configure router <i>named-item-64</i> mpls-labels sr-labels start number
Tree	start
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-label-range *number*

Synopsis	Static label range on the ingress router
Context	configure router <i>named-item-64</i> mpls-labels static-label-range <i>number</i>
Tree	static-label-range
Range	0 to 1048544
Default	18400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mss-adjust

Synopsis	Enable the mss-adjust context
Context	configure router <i>named-item-64</i> mss-adjust
Tree	mss-adjust
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-group *number***WARNING:**

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

Synopsis	NAT group used for TCP-MSS adjustment
Context	configure router <i>named-item-64</i> mss-adjust nat-group <i>number</i>
Tree	nat-group
Max. range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

segment-size *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	configure router <i>named-item-64</i> mss-adjust segment-size <i>number</i>

Tree	segment-size
Range	160 to 10240
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat

Synopsis	Enable the nat context
Context	configure router <i>named-item-64</i> nat
Tree	nat
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

inside

Synopsis	Enter the inside context
Context	configure router <i>named-item-64</i> nat inside
Tree	inside
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

large-scale

Synopsis	Enter the large-scale context
Context	configure router <i>named-item-64</i> nat inside large-scale
Tree	large-scale
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy *reference*



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name for LSN
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Context	configure router <i>named-item-64</i> nat inside large-scale nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>external-named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat44

Synopsis	Enter the nat44 context
Context	configure router <i>named-item-64</i> nat inside large-scale nat44
Tree	nat44
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

destination-prefix [[ip-prefix-length](#)] *ipv4-unicast-prefix*

Synopsis	Enter the destination-prefix list instance
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 destination-prefix <i>ipv4-unicast-prefix</i>
Tree	destination-prefix
Max. instances	6144
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ip-prefix-length] *ipv4-unicast-prefix*

Synopsis	IP prefix for the destination address
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 destination-prefix <i>ipv4-unicast-prefix</i>
Tree	destination-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy reference

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 destination-prefix <i>ipv4-unicast-prefix</i> nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>external-named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

deterministic

Synopsis	Enter the deterministic context
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic
Tree	deterministic
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-map [from] ipv4-address to ipv4-address nat-policy reference

Synopsis	Enter the address-map list instance
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic address-map <i>ipv4-address</i> to <i>ipv4-address</i> nat-policy <i>reference</i>
Tree	address-map
Description	<p>Commands in this context map inside IP addresses of deterministic NAT44 subscribers to the outside IP addresses in a NAT pool.</p> <p>This context is only applicable to deterministic NAT44 with a single ESA-VM in a NAT-group. The number of subscribers per outside IP address is flexible and not restricted to a discrete range governed by the 2^n rule.</p> <p>When context is configured, the max-subscriber-limit command must be set to 1.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[from] ipv4-address

Synopsis	First IP address of inside IP NAT range
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic address-map ipv4-address to ipv4-address nat-policy reference
Tree	address-map
Description	This command specifies the starting IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

to ipv4-address

Synopsis	Ending IP address of inside IP NAT range
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic address-map ipv4-address to ipv4-address nat-policy reference
Tree	address-map
Description	This command specifies the ending IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy reference

Synopsis	NAT policy name for LSN
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic address-map ipv4-address to ipv4-address nat-policy reference
Tree	address-map
Reference	configure service nat nat-policy external-named-item
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of address map
Context	configure router named-item-64 nat inside large-scale nat44 deterministic address-map ipv4-address to ipv4-address nat-policy reference admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

outside-range *ipv4-address*



WARNING:

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

Synopsis	First outside IP address in NAT pool
Context	configure router named-item-64 nat inside large-scale nat44 deterministic address-map ipv4-address to ipv4-address nat-policy reference outside-range <i>ipv4-address</i>
Tree	outside-range
Description	This command specifies the first outside IP address in the NAT pool. The last outside IP address is determined by the number of subscribers mapped to an outside IP address via the configure router nat outside pool large-scale subscriber-limit and configure service vprn nat outside pool large-scale subscriber-limit commands.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

prefix-map [[source-prefix](#)] *ipv4-unicast-prefix* [nat-policy](#) *reference*

Synopsis	Enter the prefix-map list instance
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Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference
Tree	prefix-map
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[source-prefix] *ipv4-unicast-prefix*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy *reference*

Synopsis	NAT policy
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference
Tree	prefix-map
Reference	configure service nat nat-policy <i>external-named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure router <i>named-item-64</i> nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

map [**from**] *ipv4-address* **to** *ipv4-address*

Synopsis Enter the **map** list instance

Context **configure** **router** *named-item-64* **nat** **inside** **large-scale** **nat44** **deterministic** **prefix-map** *ipv4-unicast-prefix* **nat-policy** *reference* **map** *ipv4-address* **to** *ipv4-address*

Tree **map**

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[from] *ipv4-address*

Synopsis First IP address of inside IP NAT range

Context **configure** **router** *named-item-64* **nat** **inside** **large-scale** **nat44** **deterministic** **prefix-map** *ipv4-unicast-prefix* **nat-policy** *reference* **map** *ipv4-address* **to** *ipv4-address*

Tree **map**

Description This command specifies the starting IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

to *ipv4-address*

Synopsis Ending IP address of inside IP NAT range

Context **configure** **router** *named-item-64* **nat** **inside** **large-scale** **nat44** **deterministic** **prefix-map** *ipv4-unicast-prefix* **nat-policy** *reference* **map** *ipv4-address* **to** *ipv4-address*

Tree **map**

Description This command specifies the ending IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

first-outside-address *ipv4-address*

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

Synopsis

Outside IP address mapped to inside IP address range

Context

configure **router** *named-item-64* **nat** **inside** **large-scale** **nat44** **deterministic** **prefix-map** *ipv4-unicast-prefix* **nat-policy** **reference** **map** *ipv4-address* **to** *ipv4-address* **first-outside-address** *ipv4-address*

Tree

first-outside-address

String format

'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes

This element is mandatory.

Introduced

25.3.R2

Platforms

7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-subscriber-limit *number*

**WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis

Ingress hashing for load distribution across ESA-VMs

Context

configure **router** *named-item-64* **nat** **inside** **large-scale** **nat44** **max-subscriber-limit** *number*

Tree

max-subscriber-limit

Description

This command configures the maximum number of classic LSN subscribers within a consecutive range of IP addresses that are processed by the same ESA-VM. It directly defines the granularity of upstream traffic distribution across ESA-VMs within the scope of an inside routing context. The ingress hashing mechanism used for traffic distribution is based on source IPv4 addresses or prefixes.

Range

1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768 | 65536

Introduced

25.3.R2

Platforms

7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

outside

Synopsis	Enter the outside context
Context	configure router <i>named-item-64</i> nat outside
Tree	outside
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

filters

Synopsis	Enter the filters context
Context	configure router <i>named-item-64</i> nat outside filters
Tree	filters
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

downstream

Synopsis	Enter the downstream context
Context	configure router <i>named-item-64</i> nat outside filters downstream
Tree	downstream
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure router <i>named-item-64</i> nat outside filters downstream ipv4 reference
Tree	ipv4
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

upstream

Synopsis	Enter the upstream context
Context	configure router <i>named-item-64</i> nat outside filters upstream
Tree	upstream
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure router <i>named-item-64</i> nat outside filters upstream ipv4 <i>reference</i>
Tree	ipv4
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mtu number

Synopsis	MTU for downstream traffic
Context	configure router <i>named-item-64</i> nat outside mtu <i>number</i>
Tree	mtu
Range	512 to 9000
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool [[name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i>
Tree	pool
Max. instances	4096
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	NAT pool name
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i>
Tree	<i>pool</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-range [**start**] *ipv4-unicast-address* **end** *ipv4-unicast-address*

Synopsis	Enter the address-range list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	<i>address-range</i>
Max. instances	4096
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[start] *ipv4-unicast-address*

Synopsis	Lower bound of the NAT address range
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	<i>address-range</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end ipv4-unicast-address

Synopsis	Upper bound of the NAT address range
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	address-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description description

Synopsis	Text description
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

drain boolean

Synopsis	Start or stop draining this NAT address range
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i> drain <i>boolean</i>
Tree	drain
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword

Synopsis	Administrative state of the outside routing NAT pool
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Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

applications

Synopsis	Enter the applications context
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> applications
Tree	applications
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

agnostic *boolean*

- **WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.
- **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> applications agnostic <i>boolean</i>
Tree	agnostic
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

use-interface-ip *boolean*

- **WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

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

Synopsis	Use an IPv4 interface for NAT
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> applications use-interface-ip <i>boolean</i>
Tree	use-interface-ip
Description	When configured to true , the router uses the IPv4 address of a NAT enabled local interface as the public IP address, within the same outside (public) routing context. Only one such NAT'd interface can be defined per outside routing context.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-echo-reply *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> icmp-echo-reply <i>boolean</i>
Tree	icmp-echo-reply
Description	This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use. In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it. In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.

	In LSN, the reply from an outside IP address is generated regardless if a binding is present.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

large-scale

Synopsis	Enter the large-scale context
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> large-scale
Tree	large-scale
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

subscriber-limit *number*



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> large-scale subscriber-limit <i>number</i>
Tree	subscriber-limit
Range	1 to 65535 4294967295
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

use-interface-ip

Synopsis	Enter the use-interface-ip context
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> large-scale use-interface-ip
Tree	use-interface-ip
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-reserved-ports *number***WARNING:**

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

Synopsis	Number of ports per protocol reserved for CPM traffic
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> large-scale use-interface-ip cpm-reserved-ports <i>number</i>
Tree	cpm-reserved-ports
Description	This command configures the router to reserve ports specifically for local (CPM) traffic. On the public IPv4 address of a NAT interface, the ports are shared between CPM traffic and transit traffic passing through the node. This reservation ensures that NAT traffic destined for the local node (CPM traffic) is guaranteed a minimum number of available ports, even if the public IPv4 port pool becomes exhausted.
Range	0 to 65535
Default	10
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

use-well-known-ports *boolean*

Synopsis	Enable dynamic allocation of well-known ports
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> large-scale use-interface-ip use-well-known-ports <i>boolean</i>
Tree	use-well-known-ports
Description	<p>When configured to true, the router configures the dynamic allocation of well-known ports for interface-based NAT.</p> <p>When configured to false, well-known ports are not dynamically allocated for either transit traffic or traffic initiated from the control plane.</p> <p>This command can only be configured when the configure service vprn nat outside pool application use-interface-ip is set to true.</p> <p>Ports within the well-known range (0-1023) can still be allocated statically using static port forwarding.</p>
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mode *keyword*

**WARNING:**

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

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	configure router named-item-64 nat outside pool named-item mode <i>keyword</i>
Tree	mode
Options	auto, napt, one-to-one
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

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

Synopsis	Create a NAT group
Context	configure router named-item-64 nat outside pool named-item nat-group <i>reference</i>
Tree	nat-group
Reference	configure isa nat-group <i>number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-forwarding

Synopsis	Enter the port-forwarding context
Context	configure router named-item-64 nat outside pool named-item port-forwarding

Tree	port-forwarding
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic-block-reservation *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Reserve dynamic block for subscriber
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> port-forwarding dynamic-block-reservation <i>boolean</i>
Tree	dynamic-block-reservation
Description	<p>When configured to true, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p> <p>When configured to false, dynamic port blocks are not reserved when the first port forward for the subscriber is created.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range-end *number*



WARNING:

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



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
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Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> <i>port-forwarding</i> <i>range-end</i> <i>number</i>
Tree	<i>range-end</i>
Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-start command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If unconfigured, the range-end implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0 1023 to 65535
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-reservation

Synopsis	Enter the port-reservation context
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> <i>port-reservation</i>
Tree	<i>port-reservation</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-blocks *number*



WARNING:

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



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> <i>port-reservation</i> <i>port-blocks</i> <i>number</i>
Tree	<i>port-blocks</i>
Description	In CGN, this command specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.

For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the **l2-aware port-block-extension** hierarchy in the NAT pool.

Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ports *number*



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



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	configure <i>router</i> <i>named-item-64</i> nat <i>outside pool</i> <i>named-item</i> port-reservation ports <i>number</i>
Tree	ports
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For Layer 2 aware NAT, this command specifies the size of the initial port block of a subscriber in the pool. Additional port blocks (extended port blocks) for the Layer 2 aware subscriber must be explicitly enabled under the l2-aware port-block-extension hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port blocks.</p> <p>For deterministic pools, the port range begins with zero. However, for non-deterministic pools, the port range begins with one.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

type *keyword*

- **WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.
- **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> type <i>keyword</i>
Tree	type
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

watermarks

Synopsis	Enable the watermarks context
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

high *number*

Synopsis	High watermark percentage
Context	configure <i>router</i> <i>named-item-64</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>named-item</i> watermarks high <i>number</i>
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

low number

Synopsis	Low watermark percentage
Context	configure router <i>named-item-64</i> nat outside pool <i>named-item</i> watermarks low <i>number</i>
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

network-domains

Synopsis	Enter the network-domains context
Context	configure router <i>named-item-64</i> network-domains
Tree	network-domains
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-domain [[domain-name](#)] *named-item*

Synopsis	Enter the network-domain list instance
Context	configure router <i>named-item-64</i> network-domains network-domain <i>named-item</i>
Tree	network-domain
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[domain-name] *named-item*

Synopsis	Network domain name
Context	configure router <i>named-item-64</i> network-domains network-domain <i>named-item</i>
Tree	network-domain
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> network-domains network-domain <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation

Synopsis	Enter the origin-validation context
Context	configure router <i>named-item-64</i> origin-validation
Tree	origin-validation
Description	Commands in this context configure origin validation.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpki-session [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the rpki-session list instance
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Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	rpki-session
Description	This command configures a session with an RPKI local cache server by using the RPKI to Router (RPKI-RTR) protocol. Using these sessions, the router learns dynamic VRP entries expressing valid origin AS and prefix associations. SR OS supports the RPKI-RTR protocol over TCP/IPv4 or TCP/IPv6 transport. The router can set up an RPKI-RTR session using the base routing table (in-band) or the management router (out-of-band). Use the configure router management command to configure a session using the management port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

Synopsis	IPv4 or IPv6 address for the RPKI local cache server
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	rpki-session
Description	This command specifies an IPv4 address or an IPv6 address for the RPKI local cache server. If the IPv6 address is link-local, the interface name must be appended to the IPv6 address after a hyphen (-).
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RPKI session
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	RPKI connect retry timer value
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Description	This command configures the time to wait between one failed TCP connection attempt and the next attempt.
Range	1 to 65535
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

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

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

Synopsis	Local address for the TCP connection setup
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port number



WARNING:

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

Synopsis	Destination port used to connect to the cache server
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port <i>number</i>
Tree	port
Range	0 to 65535
Default	323
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

refresh-time

Synopsis	Enter the refresh-time context
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) refresh-time
Tree	refresh-time
Description	Commands in this context configure the refresh-time and hold-time intervals that are used for liveness detection of the RPKI-RTR session.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time number

Synopsis	Length of time that the session is considered Up
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) refresh-time hold-time <i>number</i>
Tree	hold-time
Description	This command specifies the length of time that the session is considered Up without any indication that the cache server is alive and reachable. The hold time must be at least twice the refresh time, otherwise the command configuration is not accepted. The timer is reset when any PDU from the cache server is received. When the hold time expires, the session is considered Down and the stale timer starts.
Range	60 to 65535

Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value number

Synopsis	Periodic Serial Query PDUs sent for liveness detection
Context	configure router <i>named-item-64</i> origin-validation rpk-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time value <i>number</i>
Tree	value
Description	This command configures the refresh-time interval used for liveness detection of the RPKI-RTR session. The refresh time is reset when a Reset Query PDU or Serial Query PDU is sent to the cache server. When the timer expires, a new Serial Query PDU is sent with the last known serial number.
Range	30 to 32767
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-time number

Synopsis	Maximum time prefix origin validation remains usable
Context	configure router <i>named-item-64</i> origin-validation rpk-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) stale-time <i>number</i>
Tree	stale-time
Description	This command configures the maximum length of time that prefix origin validation records learned from the cache server remain usable after the RPKI-RTR session goes down. When the timer expires, all remaining stale entries associated with the session are deleted.
Range	60 to 3600
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-transport-security

Synopsis	Enter the tls-transport-security context
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-transport-security
Tree	tls-transport-security
Description	Commands in this context configure TLS transport security for an RPKI session. This context does not enable TLS. TLS is enabled for the RPKI session only when a valid TLS client profile is assigned.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

server-san-dns-auth *named-item-255*

Synopsis	DNS name used to authenticate the server SAN
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-transport-security server-san-dns-auth <i>named-item-255</i>
Tree	server-san-dns-auth
Description	<p>This command configures the DNS domain name used to authenticate the SAN field in the TLS certificate presented by the RPKI cache server.</p> <p>The DNS domain name is used only to authenticate the SAN field. It is not used for DNS resolution and does not set the destination address of the RPKI session.</p> <p>When this command is not configured, TLS does not authenticate the SAN field and accepts the SAN value presented in the server certificate.</p>
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS client profile for the RPKI session
Context	configure router <i>named-item-64</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-transport-security tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	<p>This command assigns a TLS client profile to the RPKI session.</p> <p>Assigning a valid TLS client profile to an RPKI session enables TLS on that session and allows it to initiate the TLS handshake.</p>

When this command is deleted, TLS is disabled for the RPKI session.

Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

static-entry [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [upto](#) *number* [origin-as](#) *number*

Synopsis	Enter the static-entry list instance
Context	configure router <i>named-item-64</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i>
Tree	static-entry
Description	<p>Commands in this context configure a static VRP entry indicating that a specific origin AS is either valid or invalid for a specific IP prefix range. Static VRP entries are stored, along with dynamic VRP entries (learned from local cache servers using the RPKI-RTR protocol), in the origin validation database of the router. This database is used for determining the origin validation state of IPv4 and IPv6 BGP routes received over sessions with origin validation enabled.</p> <p>Static entries can be configured only in the configure router origin-validation context of the base router.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 address with the minimum prefix and length
Context	configure router <i>named-item-64</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i>
Tree	static-entry
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

upto *number*

Synopsis	Maximum prefix length
Context	configure router <i>named-item-64</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i>
Tree	static-entry

Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-as *number*

Synopsis	Origin AS number
Context	configure router <i>named-item-64</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i>
Tree	static-entry
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

valid *boolean*

Synopsis	Designate mix of origin AS and prefix range as valid
Context	configure router <i>named-item-64</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i> valid <i>boolean</i>
Tree	valid
Description	When configured to true , the router considers this route entry as a valid combination of the origin AS and prefix range. When configured to false , the router considers this route entry as an invalid combination of the origin AS and prefix range.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf [**ospf-instance**] *number*

Synopsis	Enter the ospf list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i>
Tree	ospf
Description	Commands in this context create and configure an OSPF routing instance.

Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPF instance
Context	configure router <i>named-item-64</i> ospf <i>number</i>
Tree	ospf
Range	0 to 31
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>named-item-64</i> ospf <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

advertise-tunnel-link *boolean*

Synopsis Allow router advertisement capabilities

Context **configure** *router* *named-item-64* *ospf* *number* **advertise-tunnel-link** *boolean*

Tree [advertise-tunnel-link](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

area [[area-id](#)] *ipv4-address*

Synopsis Enter the **area** list instance

Context **configure** *router* *named-item-64* *ospf* *number* **area** *ipv4-address*

Tree [area](#)

Description Commands in this context configure an OSPF or OSPFv3 area. An area is a collection of network segments within an AS that are administratively grouped together.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[area-id] *ipv4-address*

Synopsis Area-ID attribute

Context **configure** *router* *named-item-64* *ospf* *number* [area](#) *ipv4-address*

Tree [area](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities

Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>advertise-router-capability</i> <i>boolean</i>
Tree	<i>advertise-router-capability</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [*ip-prefix-mask*] *ipv4-unicast-prefix*

Synopsis	Enter the area-range list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>area-range</i> <i>ipv4-unicast-prefix</i>
Tree	<i>area-range</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-mask] *ipv4-unicast-prefix*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>area-range</i> <i>ipv4-unicast-prefix</i>
Tree	<i>area-range</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>area-range</i> <i>ipv4-unicast-prefix</i> <i>advertise</i> <i>boolean</i>
Tree	<i>advertise</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> blackhole-aggregate <i>boolean</i>
Tree	blackhole-aggregate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> database-export-exclude <i>boolean</i>
Tree	database-export-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> import-policy <i>reference</i>

Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
Description	Commands in this context configure the attributes of the OSPF area interface. Unless they are explicitly configured, interfaces are not activated by default in any interior gateway protocol such as OSPF.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
Description	<p>This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for configure router interface and configure service ies interface commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>If the IP interface name does not exist or does not have an IP address configured, an error message is returned.</p> <p>If the IP interface exists in a different area it is moved to this area.</p>
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms7705 SAR Gen 2

adjacency-set *[id] reference*

Synopsis	Add a list entry for adjacency-set
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Max. instances	1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[id] *reference*

Synopsis	Adjacency set identity
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Reference	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-sid

Synopsis	Enable the adjacency-sid context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> adjacency-sid
Tree	adjacency-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Adjacency SID label
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Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> adjacency-sid <i>label</i> <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> advertise-subnet <i>boolean</i>
Tree	advertise-subnet
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

authentication-key encrypted-leaf

Synopsis Authentication key

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [authentication-key](#) *encrypted-leaf*

Tree [authentication-key](#)

Description This command specifies the authentication key in a protected format.
The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 94

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-keychain reference

Synopsis TCP authentication keychain for the session

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [authentication-keychain](#) *reference*

Tree [authentication-keychain](#)

Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-type keyword

Synopsis Authentication type used on OSPF interface

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [authentication-type](#) *keyword*

Tree [authentication-type](#)

Options password, message-digest

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict *boolean*

Synopsis	Enable BFD strict mode
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness strict <i>boolean</i>
Tree	strict
Description	<p>When configured to true, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness strict-mode-holddown <i>number</i>
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

conditional-advertise-prefix *reference*

Synopsis	Policy to conditionally advertise interface prefixes
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> conditional-advertise-prefix <i>reference</i>
Tree	conditional-advertise-prefix
Description	<p>This command specifies the policy that allows IS-IS, OSPF, and OSPFv3 to selectively advertise system or loopback interface prefixes (including associated SIDs and SRv6 locators) only when conditions defined in the route policy are met.</p> <p>The route policy evaluates the presence or absence of specific routes in the routing table, typically using constructs like route-exists. If the policy evaluates to accept, the interface prefix is advertised; if not, the prefix is suppressed.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535

Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-normalization

Synopsis	Enable the delay-normalization context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> delay-normalization
Tree	delay-normalization
Description	<p>Commands in this context configure delay normalization for the interface within the IGP instance. When configured, the normalized delay is used by the TLVs within the IGP link-state packets.</p> <p>When unconfigured, the measured delay is used by the respective TLVs within the IGP link-state packets.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-tolerance-interval *number*

Synopsis	Interval between two delay values on the interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> delay-normalization delay-tolerance-interval <i>number</i>
Tree	delay-tolerance-interval
Description	This command defines the interval used by the IGP to differentiate between two delay values.
Range	1 to 10000000
Units	microseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-delay *number*

Synopsis	Minimum delay on the interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> delay-normalization minimum-delay <i>number</i>

Tree	minimum-delay
Range	1 to 10000000
Units	microseconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo [[flex-algo-id](#)] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> flex-algo <i>number</i>
Tree	flex-algo
Description	Commands in this context configure the attributes of OSPFv2 flexible algorithms interface.
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-sid

Synopsis	Enable the node-sid context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> flex-algo <i>number</i> node-sid

Tree	node-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> flex-algo <i>number</i> node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> flex-algo <i>number</i> node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface-type *keyword*



WARNING:

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

Synopsis	Interface type
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> interface-type <i>keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>broadcast - Broadcast network</p> <p>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.</p> <p>non-broadcast - Non-broadcast network</p> <p>point-to-point - Point-to-point link</p> <p>Set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.</p> <p>p2mp-nbma - Point-to-multipoint on a link without broadcast or multicast support</p> <p>No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.</p> <p>secondary - Multiple secondary adjacencies allowed</p> <p>A secondary interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> load-balancing-weight <i>number</i>

Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-nh-template *reference*

Synopsis	Route next hop policy template name
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Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate policy-map route-nh-template reference
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> lsa-filter-out <i>keyword</i>
Tree	lsa-filter-out
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-digest-key [[key-id](#)] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[key-id] *number*

Synopsis	Message digest index
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md5 encrypted-leaf

Synopsis	MD5 hash key
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> message-digest-key <i>number</i> md5 <i>encrypted-leaf</i>
Tree	md5
Description	This command specifies the MD5 hash key in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 102
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric number

Synopsis	Route cost metric for the interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu number

Synopsis	MTU for the OSPF to use on the interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> mtu <i>number</i>
Tree	mtu
Range	512 to 9786
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

neighbor [address] *ipv4-unicast-address*

Synopsis Add a list entry for **neighbor**

Context **configure** **router** *named-item-64* **ospf** *number* **area** *ipv4-address* **interface** *interface-name* **neighbor** *ipv4-unicast-address*

Tree **neighbor**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis IPv4 address of the OSPFv2 neighbor

Context **configure** **router** *named-item-64* **ospf** *number* **area** *ipv4-address* **interface** *interface-name* **neighbor** *ipv4-unicast-address*

Tree **neighbor**

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

node-sid

Synopsis Enable the **node-sid** context

Context **configure** **router** *named-item-64* **ospf** *number* **area** *ipv4-address* **interface** *interface-name* **node-sid**

Tree **node-sid**

Description Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.

In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.

This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.

The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.

The **clear-n-flag** option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

clear-n-flag *boolean*

Synopsis Clear the N-flag in an OSPF prefix

Context **configure** *router* *named-item-64* *ospf* *number* *area* *ipv4-address* *interface* *interface-name* *node-sid* **clear-n-flag** *boolean*

Tree **clear-n-flag**

Description When configured to **true**, this command allows the user to clear the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system.

When configured to **false**, the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.

When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

index *number*

Synopsis Node SID index for this interface

Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> passive <i>boolean</i>
Tree	passive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> poll-interval <i>number</i>
Tree	poll-interval
Max. range	0 to 4294967295
Units	seconds

Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> priority <i>number</i>
Tree	priority
Range	0 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sid-protection *boolean*

Synopsis Allow adjacency SID protection by LFA and remote LFA

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [sid-protection](#) *boolean*

Tree [sid-protection](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transit-delay *number*

Synopsis Required LSA transmit time

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [transit-delay](#) *number*

Tree [transit-delay](#)

Range 1 to 1800

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

loopfree-alternate-exclude *boolean*

Synopsis Exclude interfaces in OSPF areas in SPF LFA computation

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [loopfree-alternate-exclude](#) *boolean*

Tree [loopfree-alternate-exclude](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nssa

Synopsis	Enable the nssa context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa
Tree	nssa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [**ip-prefix-mask**] *ipv4-unicast-prefix*

Synopsis	Enter the area-range list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa area-range <i>ipv4-unicast-prefix</i>
Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**ip-prefix-mask**] *ipv4-unicast-prefix*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa area-range <i>ipv4-unicast-prefix</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa area-range <i>ipv4-unicast-prefix</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

originate-default-route

Synopsis	Enable the originate-default-route context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa originate-default-route
Tree	originate-default-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa originate-default-route adjacency-check <i>boolean</i>
Tree	adjacency-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa originate-default-route type-nssa <i>boolean</i>
Tree	type-nssa
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa redistribute-external <i>boolean</i>
Tree	redistribute-external
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> nssa summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stub

Synopsis	Enable the stub context
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> stub
Tree	stub
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> stub default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
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Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-link [**router-id**] *ipv4-address* **transit-area** *reference*

Synopsis	Enter the virtual-link list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-id] *ipv4-address*

Synopsis	Router identity of the virtual link neighbor
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-area *reference*

Synopsis	Transit area linking the backbone to not-connected area
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
Reference	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i>
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	This command specifies the authentication key in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 94
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

authentication-type *keyword*

Synopsis Authentication type used on OSPF interface

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [virtual-link](#) *ipv4-address* [transit-area](#) *reference* [authentication-type](#) *keyword*

Tree [authentication-type](#)

Options password, message-digest

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dead-interval *number*

Synopsis OSPF wait time for Hellos before neighbor declared down

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [virtual-link](#) *ipv4-address* [transit-area](#) *reference* [dead-interval](#) *number*

Tree [dead-interval](#)

Range 2 to 65535

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-interval *number*

Synopsis Time between OSPF Hellos of this interface

Context **configure** [router](#) *named-item-64* [ospf](#) *number* [area](#) *ipv4-address* [virtual-link](#) *ipv4-address* [transit-area](#) *reference* [hello-interval](#) *number*

Tree [hello-interval](#)

Range 1 to 65535

Units seconds

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

message-digest-key [*key-id*] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[key-id] *number*

Synopsis	Message digest index
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md5 *encrypted-leaf*

Synopsis	MD5 hash key
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> message-digest-key <i>number</i> md5 <i>encrypted-leaf</i>
Tree	md5
Description	This command specifies the MD5 hash key in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 102
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asbr

Synopsis	Enable the asbr context
Context	configure router <i>named-item-64</i> ospf <i>number</i> asbr
Tree	asbr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trace-path (*number* | *keyword*)

Synopsis	Domain identity
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Context	configure router <i>named-item-64</i> ospf <i>number</i> asbr trace-path (<i>number</i> <i>keyword</i>)
Tree	trace-path
Range	0 to 31
Options	none
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	configure router <i>named-item-64</i> ospf <i>number</i> compatible-rfc1583 <i>boolean</i>
Tree	compatible-rfc1583
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database-export

Synopsis	Enable the database-export context
Context	configure router <i>named-item-64</i> ospf <i>number</i> database-export
Tree	database-export
Description	<p>Commands in this context enable the population of the extended TE Database (TE-DB) with the link-state information from a specific IGP instance.</p> <p>This information includes the IGP, TE, and SR information, prefix SID sub-TLV, adjacency SID sub-TLV, and router SR capability TLV.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure router <i>named-item-64</i> ospf <i>number</i> database-export bgp-ls-identifier
Tree	bgp-ls-identifier

Description	Commands in this context correlate, along with the Autonomous System Number (ASN), the BGP-LS NLRI advertisements of multiple BGP-LS speakers of the same IGP domain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	BGP-LS ID sent in the BGP-LS NLRI
Context	configure router <i>named-item-64</i> ospf <i>number</i> database-export bgp-ls-identifier value <i>number</i>
Tree	value
Description	<p>This command configures the BGP-LS ID to export.</p> <p>If an NRC-P network domain has multiple IGP domains, a user must configure BGP-LS speakers within each IGP domain with the same unique ASN, BGP-LS ID tuple. The BGP-LS identifier is optional and is only sent in a BGP-LS NLRI if configured in the IGP instance of an IGP domain.</p> <p>Note: If this IGP instance participates in traffic engineering with RSVP-TE or SR-TE, the traffic-engineering command configuration is not strictly required because enabling the extended TE-DB populates this information automatically. However, Nokia recommends enabling the traffic-engineering command to make the configuration consistent with other routers in the network that do not require the enabling of the extended TE-DB.</p>
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	configure router <i>named-item-64</i> ospf <i>number</i> database-export igp-identifier <i>number</i>
Tree	igp-identifier
Description	<p>This command identifies the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances. The concept of an instance ID specified for OSPF is local subnet significant (RFC 6549). An IGP identifier value can be configured to be unique within a specified IGP domain when the router sends the IGP link state information using BGP-LS.</p>
Max. range	0 to 18446744073709551615
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

reachable-ls-only *boolean*

Synopsis Encode only reachable link-state information

Context **configure** *router* *named-item-64* *ospf* *number* *database-export* *reachable-ls-only* *boolean*

Tree *reachable-ls-only*

Description When configured to **true**, the router, acting as a BGP-LS producer, must withdraw all link-state objects it has advertised in BGP, in accordance with section 5.9 of RFC 9552. This withdrawal occurs when the node that originated the corresponding LSPs is determined to be unreachable in the IGP based on the failure of a reachability check for that node. This withdrawal operation assists network controllers in assessing a reachable IGP topology, even in networks with segmented areas. For backward compatibility, the default behavior remains unchanged.

When configure to **false**, the router continues to send link-state objects even for links that fail an IGP reachability check.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entropy-label

Synopsis Enter the **entropy-label** context

Context **configure** *router* *named-item-64* *ospf* *number* *entropy-label*

Tree *entropy-label*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

override-tunnel-elc *boolean*

Synopsis Enable override of received ELC advertisements

Context **configure** *router* *named-item-64* *ospf* *number* *entropy-label* *override-tunnel-elc* *boolean*

Tree *override-tunnel-elc*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure router <i>named-item-64</i> ospf <i>number</i> export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure router <i>named-item-64</i> ospf <i>number</i> export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>named-item-64</i> ospf <i>number</i> export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>named-item-64</i> ospf <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p>

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure router <i>named-item-64</i> ospf <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure router <i>named-item-64</i> ospf <i>number</i> external-db-overflow interval <i>number</i>
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure router <i>named-item-64</i> ospf <i>number</i> external-db-overflow limit <i>number</i>
Tree	limit

Range	0 to 2147483647
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure router <i>named-item-64</i> ospf <i>number</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flexible-algorithms

Synopsis	Enter the flexible-algorithms context
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure the OSPFv2 parameters for flexible algorithm participation.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms advertise-admin-group <i>keyword</i>
Tree	advertise-admin-group
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Options	prefer-ag, eag-only, ag-eag
Default	prefer-ag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo [**flex-algo-id**] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Description	<p>Commands in this context configure the attributes of the OSPFv2 flexible algorithm.</p> <p>The maximum unique flexible algorithms can be configured on a router across all configured OSPFv2 instances. In each OSPF flexible algorithm configuration context, the OSPFv2 instance participation can be either enabled or disabled, and it configures the advertising of a locally-configured flexible algorithm definition.</p> <p>When flexible algorithm is enabled in an OSPF instance, it is enabled for all areas within the OSPF instance.</p>
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo

Range	128 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise reference

Synopsis	Flexible Algorithm Definition advertisement
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> advertise <i>reference</i>
Tree	advertise
Description	<p>This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).</p> <p>The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.</p>
Reference	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> micro-loop-avoidance
Tree	micro-loop-avoidance

Description	<p>When configured, the system enables micro-loop avoidance for an SR-OSPF flexible algorithm, and consequently, inherits the FIB delay timer from the SR-OSPF configure router ospf segment-routing context.</p> <p>When this command is configured, FIB updates are delayed before the system programs new primary next hops to avoid micro-loops.</p> <p>When configured, the feature applies to the following contexts:</p> <ul style="list-style-type: none"> • OSPFv2 SR-OSPF IPv4 tunnel (node SID) • IPv4 and IPv6 SR-TE LSPs that use a node SID in their segment list • IPv4 and IPv6 SR policies that use a node SID in their segment list <p>When micro-loop-avoidance is disabled (by removing this command from the configuration), the system forces any running FIB delay to expire immediately and programs the new next hops for all impacted node SIDs. When disabled, micro-loop avoidance is disabled instantaneously and will be disabled for the next SPF runs. Micro-loop avoidance remains disabled until it is re-enabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	configure router <i>named-item-64</i> ospf <i>number</i> flexible-algorithms flex-algo <i>number</i> participate <i>boolean</i>
Tree	participate
Description	<p>When configured to true, the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.</p> <p>When configured to false, flexible algorithm participation is not enabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>named-item-64</i> ospf <i>number</i> graceful-restart
Tree	graceful-restart
Description	Commands in this context enable OSPF graceful restart (GR) to minimize service interruption.

When the control plane of a GR-capable router fails or restarts, the neighboring routers (GR helpers) temporarily preserve OSPF forwarding information. Traffic continues to be forwarded to the restarting router using the last-known forwarding tables. If the control plane of the restarting router becomes operationally and administratively up within the grace period, the restarting router resumes normal OSPF operation. If the grace period expires, the restarting router is presumed inactive and the OSPF topology is recalculated to route traffic around the failure.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

helper-mode *boolean*

Synopsis Enable graceful restart helper for OSPF

Context **configure** *router* *named-item-64* *ospf* *number* *graceful-restart* *helper-mode* *boolean*

Tree [helper-mode](#)

Description When configured to **true**, the router operates in OSPF graceful restart helper mode and assists restarting neighbors by maintaining adjacencies and forwarding state during their graceful restart interval.

When configured to **false**, the router does not provide helper support and does not preserve adjacency or forwarding state for neighbors performing a graceful restart.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

helper-resync-timeout *number*

Synopsis Maximum resynchronization period

Context **configure** *router* *named-item-64* *ospf* *number* *graceful-restart* *helper-resync-timeout* *number*

Tree [helper-resync-timeout](#)

Description This command configures the maximum resynchronization period. If the resynchronization takes longer than the configured value, the graceful restart process stops, and the OSPF neighbor session falls back to the ExStart state for normal adjacency establishment.

Range 120 to 900

Units seconds

Default 120

Introduced 26.3.R1

Platforms 7705 SAR Gen 2

protocol

Synopsis	Enter the protocol context
Context	configure router <i>named-item-64</i> ospf <i>number</i> graceful-restart protocol
Tree	protocol
Description	Commands in this context configure which RFC is used for OSPF graceful restart signaling. If both protocols are enabled, the OSPF interface automatically uses the method indicated by the first received graceful restart signaling packet on that interface.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

lls-restart-signaling *boolean*

Synopsis	Enable LLS restart signaling protocol
Context	configure router <i>named-item-64</i> ospf <i>number</i> graceful-restart protocol lls-restart-signaling <i>boolean</i>
Tree	lls-restart-signaling
Description	When configured to true , the system enables support for RFC 4811 and RFC 4812. When configured to false , the system disables support for RFC 4811 and RFC 4812.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

standard *boolean*

Synopsis	Enable standard protocol for restart signaling
Context	configure router <i>named-item-64</i> ospf <i>number</i> graceful-restart protocol standard <i>boolean</i>
Tree	standard
Description	When configured to true , the system enables support for RFC 3623. When configured to false , the system disables support for RFC 3623.
Default	true
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	configure router <i>named-item-64</i> ospf <i>number</i> graceful-restart strict-lsa-checking <i>boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut
Tree	igp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-sr-over-srte *boolean*

Synopsis	Enable SR over SR-TE LSPs
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	When configured to true , the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with allow-sr-over-srte explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all

available SR-TE LSPs as IGP shortcuts regardless of the explicit **allow-sr-over-srte** configuration.

Under ECMP, when this command is configured to **true**, preference is given to the SR-TE LSPs with **allow-sr-over-srte** explicitly configured over the LSPs that do not have **allow-sr-over-srte** configured.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[family-type](#)] *keyword*

Synopsis	Address family type for tunnel next-hop
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Options	ipv4, srv4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution keyword

Synopsis	Resolution state for IGP shortcut tunnels
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword resolution keyword</i>
Tree	resolution
Options	none, filter, any, match-family-ip
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword resolution-filter</i>
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword resolution-filter rsvp boolean</i>
Tree	rsvp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te boolean

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword resolution-filter sr-te boolean</i>
Tree	sr-te

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure router <i>named-item-64</i> ospf <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-over-rsvp *boolean*

Synopsis	Allow LSP over RSVP in this OSPF instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	configure router <i>named-item-64</i> ospf <i>number</i> ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Description	<p>Commands in this context enable Loop-Free Alternate (LFA) computation by SPF under the IS-IS routing protocol level or under the OSPF routing protocol instance.</p> <p>When this command is enabled, it instructs the IGP SPF to attempt to pre-compute both a primary next hop and an LFA next hop for every learned prefix. IS-IS computes the primary SPF first and then computes the LFA SPF. The LFA backup next hop is only available after the LFA SPF is completed. When found, the LFA next hop is populated into the routing table along with the primary next hop for the prefix.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate augment-route-table <i>boolean</i>
Tree	augment-route-table
Description	<p>When configured to true, this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP.</p> <p>When configured to false, rLFA-specific information is not added to RTM entries.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude

Synopsis	Enter the exclude context
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-policy reference

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>loopfree-alternate</i> <i>exclude prefix-policy reference</i>
Tree	<i>prefix-policy</i>
Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure <i>policy-options</i> <i>policy-statement</i> <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-homed-prefix

Synopsis	Enable the multi-homed-prefix context
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>loopfree-alternate</i> <i>multi-homed-prefix</i>
Tree	<i>multi-homed-prefix</i>
Description	<p>Commands in this context configure a multihomed prefix LFA for both RTM routes (IP FRR) and SR-OSPF tunnels. SR-OSPF tunnels enable multihomed prefix extension in both algorithm 0 and flexible-algorithm numbers.</p> <p>This feature makes use of the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.</p> <p>This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of local anycast prefixes.</p> <p>The computed IP next-hop based backup path is added to OSPF routes of external /32 prefixes (OSPFv2 routes types 3, 4, 5, and 7) and local /32 anycast prefixes in the RTM if the prefix is not protected by base LFA or if the user set leaf preference value to all. The user must enable the ip-fast-reroute leaf to have these backup paths programmed into the FIB in datapath.</p> <p>The computed IP next hop or repair tunnel based backup path is also programmed for SR-OSPF node SID tunnels of external /32 prefixes and to /32 prefixes in same area as</p>

the computing node S and which are advertised by multiple routers (anycast prefix) in both algorithm 0 and flexible-algorithm numbers.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *keyword*

Synopsis	Multi-homed prefix LFA backup path preference
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate multi-homed-prefix preference <i>keyword</i>
Tree	preference
Options	none, all
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate remote-lfa max-pq-cost <i>number</i>
Tree	max-pq-cost
Max. range	0 to 4294967295
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate remote-lfa node-protect max-pq-nodes <i>number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context enable the use of the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPF instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate ti-lfa max-sr-frr-labels <i>number</i>
Tree	max-sr-frr-labels

Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-path-expand *boolean*

Synopsis	Expand the neighbor path
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate ti-lfa neighbor-path-expand <i>boolean</i>
Tree	neighbor-path-expand
Description	<p>When configured to true, the router uses the TI-LFA backup path computation algorithm for the protection of an IPv4 SR-OSPF node SID of a neighbor and of an adjacency SID over a link to that neighbor to avoid traffic loops when the neighbor node fails.</p> <p>The SR-OSPF TI-LFA expanded neighbor backup path expands the path from the Q node to the destination node, which is the neighbor node in this case, by first visiting the penultimate node and then riding an unprotected adjacency SID over a link to the destination node. When applied to the backup path of a neighbor IPv4 SR-OSPF node SID or of an adjacency SID over a link to this neighbor, it forces the traffic to drop at the penultimate node and does not loop in case of neighbor node failure.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>named-item-64</i> ospf <i>number</i> loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-instance *boolean*

Synopsis	Enable OSPF Multi Instance Extensions
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> multi-instance <i>boolean</i>
Tree	multi-instance
Description	<p>When configured to true, the Base router supports RFC 6549, OSPFv2 Multi-Instance Extensions.</p> <p>This support is enabled per instance and allows flexibility when migrating a particular instance from classic OSPFv2 to a multi-instance OSPFv2.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-import-policy *reference*

Synopsis	Import policy to submit IGP routes to the multicast RTM
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> multicast-import-policy <i>reference</i>
Tree	multicast-import-policy
Description	<p>This command specifies the policy used by OSPF to submit routes to the multicast RTM.</p> <p>This command applies only when the configure router ospf multicast-import command is enabled. By default, enabling multicast-import causes OSPF to submit all IGP routes to the multicast RTM. Configuring this command allows the user to specify prefixes in the policy prefix list to control OSPF route submission.</p>
Reference	configure <i>policy-options</i> <i>policy-statement</i> <i>named-item-64</i>
Max. instances	1
Notes	This element is ordered by the user.

Introduced 25.10.R1
Platforms 7705 SAR Gen 2

overload *boolean*

Synopsis Change local router state to appear overloaded
Context **configure** [router](#) *named-item-64* [ospf](#) *number* [overload](#) *boolean*
Tree [overload](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-ext-1 *boolean*

Synopsis Advertise routes with maximum metric value for overload
Context **configure** [router](#) *named-item-64* [ospf](#) *number* [overload-include-ext-1](#) *boolean*
Tree [overload-include-ext-1](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-ext-2 *boolean*

Synopsis Advertise routes with maximum metric value for overload
Context **configure** [router](#) *named-item-64* [ospf](#) *number* [overload-include-ext-2](#) *boolean*
Tree [overload-include-ext-2](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-stub *boolean*

Synopsis Advertise all stub interfaces with max metric value
Context **configure** [router](#) *named-item-64* [ospf](#) *number* [overload-include-stub](#) *boolean*
Tree [overload-include-stub](#)

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>named-item-64</i> ospf <i>number</i> overload-on-boot
Tree	overload-on-boot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time during which the router operates in overload state
Context	configure router <i>named-item-64</i> ospf <i>number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	1 to 1800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure router <i>named-item-64</i> ospf <i>number</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
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Context	configure router <i>named-item-64</i> ospf <i>number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router <i>named-item-64</i> ospf <i>number</i> rib-priority
Tree	rib-priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure router <i>named-item-64</i> ospf <i>number</i> rib-priority high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure router <i>named-item-64</i> ospf <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *router-id***WARNING:**

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

Synopsis	Unique router ID for the OSPF instance
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>router-id</i> <i>router-id</i>
Tree	<i>router-id</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>rtr-adv-lsa-limit</i>
Tree	<i>rtr-adv-lsa-limit</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>rtr-adv-lsa-limit</i> <i>log-only</i> <i>boolean</i>
Tree	<i>log-only</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>rtr-adv-lsa-limit</i> <i>max-lsa-count</i> <i>number</i>
Tree	<i>max-lsa-count</i>

Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure router <i>named-item-64</i> ospf <i>number</i> rtr-adv-lsa-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure router <i>named-item-64</i> ospf <i>number</i> rtr-adv-lsa-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing
Tree	segment-routing
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

adj-sid-hold (*number* | *keyword*)

Synopsis Adjacency SID hold time

Context **configure** **router** *named-item-64* **ospf** *number* **segment-routing** **adj-sid-hold** (*number* | *keyword*)

Tree **adj-sid-hold**

Description This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range 1 to 1800

Units seconds

Options none

Default 15

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adjacency-set [*id*] *number*

Synopsis Enter the **adjacency-set** list instance

Context **configure** *router* *named-item-64* *ospf* *number* *segment-routing* *adjacency-set* *number*

Tree *adjacency-set*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[id] *number*

Synopsis Non-zero identifier for a given adjacency set

Context **configure** *router* *named-item-64* *ospf* *number* *segment-routing* *adjacency-set* *number*

Tree *adjacency-set*

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise *boolean*

Synopsis Advertise adjacency for links terminating on same node

Context **configure** *router* *named-item-64* *ospf* *number* *segment-routing* *adjacency-set* *number* *advertise* *boolean*

Tree *advertise*

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

parallel *boolean*

Synopsis Require adjacency members to terminate on same neighbor

Context **configure** *router* *named-item-64* *ospf* *number* *segment-routing* *adjacency-set* *number* *parallel* *boolean*

Tree *parallel*

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sid

Synopsis	Enable the sid context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i> sid
Tree	sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Adjacency SID label
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i> sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing adjacency-sid allocate-dual-sids <i>boolean</i>

Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-node-sid

Synopsis	Enable the backup-node-sid context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing backup-node-sid
Tree	backup-node-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing backup-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295

Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix *ipv4-unicast-prefix*

Synopsis	IP prefix and prefix length for the backup node SID
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing backup-node-sid ip-prefix <i>ipv4-unicast-prefix</i>
Tree	ip-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing backup-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing entropy-label <i>boolean</i>
Tree	entropy-label
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-tunnel-table *keyword*

Synopsis	Export tunnel table
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Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing export-tunnel-table <i>keyword</i>
Tree	export-tunnel-table
Options	ldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mapping-server

Synopsis	Enter the mapping-server context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server
Tree	mapping-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF mapping server
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-sid-map [[sid-index](#)] *number*

Synopsis	Enter the node-sid-map list instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sid-index] number

Synopsis	Start SID index for the node SID mapping
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix ipv4-prefix

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

Synopsis	Starting prefix of the mapping
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> ip-prefix <i>ipv4-prefix</i>
Tree	ip-prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range number

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

Synopsis	Number of prefixes mapped by Extended Range Prefix TLV
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> range <i>number</i>
Tree	range
Range	1 to 65535
Default	1

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope

Synopsis	Enter the scope context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> scope
Tree	scope
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area reference

Synopsis	Area ID in which the advertise Extended Range TLV is advertised
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> scope area <i>reference</i>
Tree	area
Reference	configure router <i>named-item-64</i> ospf <i>number</i> area <i>ipv4-address</i>
Notes	The following elements are part of a choice: area or as .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as

Synopsis	Advertise Extended Range TLV in whole autonomous system
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> scope as
Tree	as
Notes	The following elements are part of a choice: area or as .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-sid-depth

Synopsis	Enter the maximum-sid-depth context
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Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>segment-routing</i> <i>maximum-sid-depth</i>
Tree	<i>maximum-sid-depth</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>segment-routing</i> <i>maximum-sid-depth</i> override-bmi <i>number</i>
Tree	<i>override-bmi</i>
Description	<p>This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.</p> <p>When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.</p>
Range	0 to 13
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf</i> <i>number</i> <i>segment-routing</i> <i>maximum-sid-depth</i> override-erld <i>number</i>
Tree	<i>override-erld</i>
Description	<p>This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.</p> <p>When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.</p>
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing micro-loop-avoidance
Tree	micro-loop-avoidance
Description	Commands in this context configure micro-loop avoidance for SR-OSPF.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fib-delay *number*

Synopsis	FIB delay
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing micro-loop-avoidance fib-delay <i>number</i>
Tree	fib-delay
Description	<p>This command configures the FIB delay before programming new primary next hops.</p> <p>Configure the FIB delay timer to a value that corresponds to the worst-case IGP convergence in a network domain. The default FIB delay timer value corresponds to a network with a nominal convergence time.</p> <p>When configured, the feature applies to the following contexts:</p> <ul style="list-style-type: none">• SPFv2 SR-OSPF IPv4 tunnel (node SID)• IPv4 and IPv6 SR-TE LSPs that use a node SID in their segment list• IPv4 and IPv6 SR policies that use a node SID in their segment list <p>When micro-loop avoidance is disabled, the system forces any running FIB delay to expire immediately and the system programs new next hops for all impacted node SIDs. When disabled, micro-loop avoidance is disabled instantaneously and will be disabled for the next SPF runs. Micro-loop avoidance remains disabled until it is re-enabled.</p>
Range	1 to 300
Units	deciseconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing prefix-sid-range

Tree	prefix-sid-range
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	BGP global SR range allocation
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-index *number*



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

Synopsis	Upper bound value for the local SID index
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 1048575
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-label *number***WARNING:**

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

Synopsis	Lower bound value for the local label offset
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 1048575
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlb *reference*

Synopsis	Segment routing local block
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing srlb <i>reference</i>
Tree	srlb
Reference	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing tunnel-mtu <i>number</i>
Tree	tunnel-mtu
Range	512 to 9786
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	configure router <i>named-item-64</i> ospf <i>number</i> segment-routing tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref

Description This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9
- ROUTE_PREF_OSPF_TTM 10
- ROUTE_PREF_ISIS_TTM 11
- ROUTE_PREF_BGP_TTM 12
- ROUTE_PREF_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more instances of that protocol programmed a tunnel for the same prefix. The selection of a SR tunnel in this case is based on the lowest preference IGP instance. In the case of a tie, the instance with the lowest metric SR tunnel is selected over the lowest numbered IGP instance. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enter the timers context
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers lsa-accumulate <i>number</i>
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers Isa-arrival <i>number</i>
Tree	Isa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-generate

Synopsis	Enter the Isa-generate context
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers Isa-generate
Tree	Isa-generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers Isa-generate Isa-initial-wait <i>number</i>
Tree	Isa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers lsa-generate lsa-second-wait <i>number</i>
Tree	lsa-second-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers lsa-generate max-lsa-wait <i>number</i>
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers redistribute-delay <i>number</i>
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure router <i>named-item-64</i> ospf <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait

Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traffic-engineering *boolean*

Synopsis	Calculate traffic engineering route
Context	configure router <i>named-item-64</i> ospf <i>number</i> traffic-engineering <i>boolean</i>
Tree	traffic-engineering
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traffic-engineering-options

Synopsis	Enter the traffic-engineering-options context
Context	configure router <i>named-item-64</i> ospf <i>number</i> traffic-engineering-options
Tree	traffic-engineering-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	configure router <i>named-item-64</i> ospf <i>number</i> traffic-engineering-options advertise-delay <i>boolean</i>
Tree	advertise-delay
Description	<p>When configured to true, the router advertises link delay in the IGP LSDB within the OSPF-TE TLV attribute or when the Application-Specific Link Attribute (ASLA) is enabled within SR-TE ASLA.</p> <p>When the router is configured under the configure router ospf traffic-engineering-options sr-te application-specific-link-attributes command to generate SR-TE ASLA attributes, link delay is advertised as a legacy RFC 3630 TLV when RSVP-TE is enabled and as an ASLA RFC 8920 TLV for SR-TE when MPLS is enabled for an interface.</p>

SR OS accepts and handles both legacy RSVP-TE TLVs and ASLAs for the RSVP application. However, SR OS only advertises RFC 3630 legacy RSVP-TE TLVs (as recommended by RFC 8920) to avoid compatibility issues.

When configured to **false**, the router disables link delay advertisement.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *keyword*

Synopsis	Advertisement of link attributes for SR-TE
Context	configure router <i>named-item-64</i> ospf <i>number</i> traffic-engineering-options sr-te <i>keyword</i>
Tree	sr-te
Description	This command specifies the advertisement of TE attributes of each link on a per-application basis for RSVP-TE and SR-TE applications.
Options	false, legacy, application-specific-link-attributes
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure router <i>named-item-64</i> ospf <i>number</i> unicast-import <i>boolean</i>
Tree	unicast-import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf3 [[ospf-instance](#)] *number*

Synopsis	Enter the ospf3 list instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i>
Tree	ospf3
Description	Commands in this context create or edit an OSPFv3 routing instance.

Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPF instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i>
Tree	ospf3
Range	0 to 31 64 to 95
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

area [[area-id](#)] *ipv4-address*

Synopsis Enter the **area** list instance

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address*

Tree [area](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[area-id] *ipv4-address*

Synopsis Area-ID attribute

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address*

Tree [area](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [advertise-router-capability](#) *boolean*

Tree [advertise-router-capability](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

area-range [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **area-range** list instance

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [area-range](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> blackhole-aggregate <i>boolean</i>
Tree	blackhole-aggregate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> database-export-exclude <i>boolean</i>
Tree	database-export-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-lsa *keyword*

Synopsis	Extended LSA format in an OSPFv3 area
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> extended-lsa <i>keyword</i>
Tree	extended-lsa
Options	only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
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Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
Description	<p>This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for configure router interface and configure service interfaces interface commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>If the IP interface name does not exist or does not have an IP address configured, an error message is returned.</p> <p>If the IP interface exists in a different area it is moved to this area.</p>
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication

Synopsis	Enable the authentication context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> authentication
Tree	authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inbound *reference*

Synopsis	sa-name
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> authentication inbound <i>reference</i>
Tree	inbound

Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound *reference*

Synopsis	sa-name
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> authentication outbound <i>reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict boolean

Synopsis	Enable BFD strict mode
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>interface</i> <i>interface-name</i> <i>bfd-liveness</i> <i>strict</i> <i>boolean</i>
Tree	<i>strict</i>
Description	<p>When configured to true, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-mode-holddown number

Synopsis	Adjacency up time delay after BFD session establishment
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>interface</i> <i>interface-name</i> <i>bfd-liveness</i> <i>strict-mode-holddown</i> <i>number</i>
Tree	<i>strict-mode-holddown</i>
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

conditional-advertise-prefix reference

Synopsis	Policy to conditionally advertise interface prefixes
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>interface</i> <i>interface-name</i> <i>conditional-advertise-prefix</i> <i>reference</i>

Tree	conditional-advertise-prefix
Description	<p>This command specifies the policy that allows IS-IS, OSPF, and OSPFv3 to selectively advertise system or loopback interface prefixes (including associated SIDs and SRv6 locators) only when conditions defined in the route policy are met.</p> <p>The route policy evaluates the presence or absence of specific routes in the routing table, typically using constructs like route-exists. If the policy evaluates to accept, the interface prefix is advertised; if not, the prefix is suppressed.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-type *keyword***WARNING:**

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

Synopsis	Interface type
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> interface-type <i>keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>broadcast - Broadcast network</p> <p>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.</p> <p>non-broadcast - Non-broadcast network</p> <p>point-to-point - Point-to-point link</p> <p>Set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.</p> <p>p2mp-nbma - Point-to-multipoint on a link without broadcast or multicast support</p> <p>No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.</p> <p>secondary - Multiple secondary adjacencies allowed</p> <p>A secondary interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF3 interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight

Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-nh-template *reference*

Synopsis	Route next hop policy template name
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Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate policy-map route-nh-template reference
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> lsa-filter-out <i>keyword</i>
Tree	lsa-filter-out
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Route cost metric for the interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> mtu <i>number</i>
Tree	mtu
Range	512 to 9786

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

neighbor [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Add a list entry for **neighbor**
 Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [neighbor](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [neighbor](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

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

Synopsis Neighbor link local address
 Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [neighbor](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [neighbor](#)
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

node-sid

Synopsis Enable the **node-sid** context
 Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [node-sid](#)
 Tree [node-sid](#)
 Description Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.
 In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.
 This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.

The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.

The **clear-n-flag** option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

clear-n-flag *boolean*

Synopsis Clear the N-flag in an OSPF3 prefix

Context **configure** *router* *named-item-64* *ospf3* *number* *area* *ipv4-address* *interface* *interface-name* *node-sid* **clear-n-flag** *boolean*

Tree **clear-n-flag**

Description When configured to **true**, this command allows the user to clear the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system.

When configured to **false**, the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.

When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

index *number*

Synopsis Node SID index for this interface

Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> passive <i>boolean</i>
Tree	passive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> poll-interval <i>number</i>
Tree	poll-interval
Max. range	0 to 4294967295
Units	seconds

Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> priority <i>number</i>
Tree	priority
Range	0 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sid-protection *boolean*

Synopsis Allow adjacency SID protection by LFA and remote LFA

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [sid-protection](#) *boolean*

Tree [sid-protection](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transit-delay *number*

Synopsis Required LSA transmit time

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [transit-delay](#) *number*

Tree [transit-delay](#)

Range 1 to 1800

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

key-rollover-interval *number*

Synopsis Key rollover interval

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* [area](#) *ipv4-address* [key-rollover-interval](#) *number*

Tree [key-rollover-interval](#)

Range 10 to 300

Units seconds

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nssa

Synopsis	Enable the nssa context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa
Tree	nssa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [**ip-prefix-mask**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the area-range list instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Addresses on ABR for route summarization or suppression
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa <i>area-range</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

originate-default-route

Synopsis	Enable the originate-default-route context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa originate-default-route
Tree	originate-default-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa originate-default-route adjacency-check <i>boolean</i>
Tree	adjacency-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa originate-default-route type-nssa <i>boolean</i>
Tree	type-nssa
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa redistribute-external <i>boolean</i>
Tree	redistribute-external
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stub

Synopsis	Enable the stub context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> stub
Tree	stub
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> stub default-metric <i>number</i>

Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-link [[router-id](#)] *ipv4-address* [transit-area](#) *reference*

Synopsis	Enter the virtual-link list instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-id] *ipv4-address*

Synopsis	Router ID of the virtual link neighbor
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-area *reference*

Synopsis	Transit area linking backbone and non-connected area
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
Reference	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication

Synopsis	Enable the authentication context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication
Tree	authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inbound *reference*

Synopsis	sa-name
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication inbound <i>reference</i>

Tree	inbound
Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound *reference*

Synopsis	sa-name
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication outbound <i>reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535

Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asbr

Synopsis	Enable the asbr context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> asbr
Tree	asbr
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

database-export

Synopsis	Enable the database-export context
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> database-export
Tree	database-export
Description	<p>Commands in this context enable the population of the extended TE Database (TE-DB) with the link-state information from a specific IGP instance.</p> <p>This information includes the IGP, TE, and the SR information, prefix SID sub-TLV, adjacency SID sub-TLV, and router SR capability TLV.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Description	Commands in this context correlate, along with the Autonomous System Number (ASN), the BGP-LS NLRI advertisements of multiple BGP-LS speakers of the same IGP domain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	BGP-LS ID sent in the BGP-LS NLRI
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> database-export bgp-ls-identifier value <i>number</i>
Tree	value
Description	<p>This command configures the BGP-LS ID to export.</p> <p>If an NRC-P network domain has multiple IGP domains, a user must configure BGP-LS speakers within each IGP domain with the same unique ASN, BGP-LS ID tuple. The BGP-LS identifier is optional and is only sent in a BGP-LS NLRI if configured in the IGP instance of an IGP domain.</p> <p>Note: If this IGP instance participates in traffic engineering with RSVP-TE or SR-TE, the traffic-engineering command configuration is not strictly required because enabling the</p>

extended TE-DB populates this information automatically. However, Nokia recommends enabling the **traffic-engineering** command to make the configuration consistent with other routers in the network that do not require the enabling of the extended TE-DB.

Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> database-export igp-identifier <i>number</i>
Tree	igp-identifier
Description	This command identifies the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances. The concept of an instance ID specified for OSPF is local subnet significant (RFC 6549). An IGP identifier value can be configured to be unique within a specified IGP domain when the router sends the IGP link state information using BGP-LS.
Max. range	0 to 18446744073709551615
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-ls-only *boolean*

Synopsis	Encode only reachable link-state information
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> database-export reachable-ls-only <i>boolean</i>
Tree	reachable-ls-only
Description	<p>When configured to true, the router, acting as a BGP-LS producer, must withdraw all link-state objects it has advertised in BGP, in accordance with section 5.9 of RFC 9552. This withdrawal occurs when the node that originated the corresponding LSPs is determined to be unreachable in the IGP based on the failure of a reachability check for that node. This withdrawal operation assists network controllers in assessing a reachable IGP topology, even in networks with segmented areas. For backward compatibility, the default behavior remains unchanged.</p> <p>When configure to false, the router continues to send link-state objects even for links that fail an IGP reachability check.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

export-limit

Synopsis Enable the **export-limit** context

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* **export-limit**

Tree [export-limit](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* **export-limit** [log-percent](#) *number*

Tree [log-percent](#)

Range 1 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

number *number*

Synopsis Maximum routes or prefixes exported from route table

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* **export-limit** [number](#) *number*

Tree [number](#)

Range 1 to 4294967295

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

export-policy *reference*

Synopsis Export policies that determine exported routes

Context **configure** [router](#) *named-item-64* [ospf3](#) *number* **export-policy** *reference*

Tree [export-policy](#)

Description This command configures export routing policies for the routes exported from the routing table to IS-IS.

If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-lsa *keyword*



WARNING:

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

Synopsis	Extended LSA format in an OSPFv3 area
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> extended-lsa <i>keyword</i>
Tree	extended-lsa
Options	sparse, only
Default	sparse
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval number

Synopsis	Time during which the router operates in overload
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> external-db-overflow <i>interval</i> <i>number</i>
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit number

Synopsis	Number of external LSA at which overload is triggered
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> external-db-overflow <i>limit</i> <i>number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-preference number

Synopsis	Preference for OSPF external routes
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> graceful-restart

Tree	graceful-restart
Description	<p>Commands in this context enable OSPF graceful restart (GR) to minimize service interruption.</p> <p>When the control plane of a GR-capable router fails or restarts, the neighboring routers (GR helpers) temporarily preserve OSPF forwarding information. Traffic continues to be forwarded to the restarting router using the last-known forwarding tables. If the control plane of the restarting router becomes operationally and administratively up within the grace period, the restarting router resumes normal OSPF operation. If the grace period expires, the restarting router is presumed inactive and the OSPF topology is recalculated to route traffic around the failure.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Description	<p>When configured to true, the router operates in OSPF graceful restart helper mode and assists restarting neighbors by maintaining adjacencies and forwarding state during their graceful restart interval.</p> <p>When configured to false, the router does not provide helper support and does not preserve adjacency or forwarding state for neighbors performing a graceful restart.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> graceful-restart strict-lsa-checking <i>boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> igp-shortcut
Tree	igp-shortcut
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] keyword

Synopsis	Address family type for the tunnel next hop
Context	configure router named-item-64 ospf3 number igp-shortcut tunnel-next-hop family keyword
Tree	family
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution keyword

Synopsis	Resolution state for IGP shortcut tunnels
Context	configure router named-item-64 ospf3 number igp-shortcut tunnel-next-hop family keyword resolution keyword
Tree	resolution
Options	none, filter, any, match-family-ip
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router named-item-64 ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router named-item-64 ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean

Tree	rsvp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop <i>family</i> <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Description	<p>Commands in this context enable Loop-Free Alternate (LFA) computation by SPF under the IS-IS routing protocol level or under the OSPF routing protocol instance.</p> <p>When this command is enabled, it instructs the IGP SPF to attempt to pre-compute both a primary next hop and an LFA next hop for every learned prefix. IS-IS computes the primary SPF first and then computes the LFA SPF. The LFA backup next hop is only available after the LFA SPF is completed. When found, the LFA next hop is populated into the routing table along with the primary next hop for the prefix.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude

Synopsis	Enter the exclude context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate remote-lfa max-pq-cost <i>number</i>
Tree	max-pq-cost
Max. range	0 to 4294967295
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate remote-lfa node-protect max-pq-nodes <i>number</i>

Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context enable the use of the Topology Independent Loop-Free Alternate (TI-LFA) algorithm in the LFA SPF calculation for this OSPFv3 instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate ti-lfa max-sr-frr-labels <i>number</i>
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> loopfree-alternate ti-lfa node-protect
Tree	node-protect

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

multicast-import *boolean*

Synopsis Submit routes into the multicast Route Table Manager
Context **configure** *router* *named-item-64* *ospf3* *number* **multicast-import** *boolean*
Tree **multicast-import**
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload *boolean*

Synopsis Change local router state to appear overloaded
Context **configure** *router* *named-item-64* *ospf3* *number* **overload** *boolean*
Tree **overload**
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-ext-1 *boolean*

Synopsis Advertise routes with maximum metric value for overload
Context **configure** *router* *named-item-64* *ospf3* *number* **overload-include-ext-1** *boolean*
Tree **overload-include-ext-1**
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-ext-2 *boolean*

Synopsis Advertise routes with maximum metric value for overload
Context **configure** *router* *named-item-64* *ospf3* *number* **overload-include-ext-2** *boolean*
Tree **overload-include-ext-2**

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> overload-include-stub <i>boolean</i>
Tree	overload-include-stub
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> overload-on-boot
Tree	overload-on-boot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Router interval in overload before normal operations
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> preference <i>number</i>

Tree	preference
Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rib-priority
Tree	rib-priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rib-priority high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *router-id***WARNING:**

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

Synopsis	Unique router ID for the OSPF instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> router-id <i>router-id</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rtr-adv-lsa-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> rtr-adv-lsa-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Units	percent

Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing
Tree	segment-routing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold
Description	This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool

where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.

- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing adjacency-sid allocate-dual-sids <i>boolean</i>
Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing prefix-sid-range
Tree	prefix-sid-range
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global

Synopsis	BGP global SR range allocation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing prefix-sid-range global
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-index *number***WARNING:**

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

Synopsis	Upper bound value for the local SID index
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> <i>segment-routing prefix-sid-range max-index</i> <i>number</i>
Tree	<i>max-index</i>
Range	0 to 1048575
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start-label *number*



WARNING:

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

Synopsis	Lower bound value for the local label offset
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> <i>segment-routing prefix-sid-range start-label</i> <i>number</i>
Tree	<i>start-label</i>
Range	0 to 1048575
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	configure <i>router</i> <i>named-item-64</i> <i>ospf3</i> <i>number</i> <i>segment-routing tunnel-mtu</i> <i>number</i>
Tree	<i>tunnel-mtu</i>
Range	512 to 9786
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> segment-routing tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the any value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.</p> <p>The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.</p> <p>The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).</p> <p>Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.</p> <p>The global default TTM preference for the tunnel types is as follows:</p> <ul style="list-style-type: none"> • ROUTE_PREF_RSVP 7 • ROUTE_PREF_SR_TE 8 • ROUTE_PREF_LDP 9 • ROUTE_PREF_OSPF_TTM 10 • ROUTE_PREF_ISIS_TTM 11 • ROUTE_PREF_BGP_TTM 12 • ROUTE_PREF_GRE 255 <p>The default value for SR-ISIS or SR-OSPF is the same regardless if one or more instances of that protocol programmed a tunnel for the same prefix. The selection of a SR tunnel in this case is based on the lowest preference IGP instance. In the case of a tie, the instance with the lowest metric SR tunnel is selected over the lowest numbered IGP instance. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.</p>

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enter the timers context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers lsa-accumulate <i>number</i>
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers lsa-arrival <i>number</i>
Tree	lsa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-generate

Synopsis	Enter the lsa-generate context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers lsa-generate
Tree	lsa-generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers lsa-generate lsa-initial-wait <i>number</i>
Tree	lsa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers lsa-generate lsa-second-wait <i>number</i>
Tree	lsa-second-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers lsa-generate max-lsa-wait <i>number</i>
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers redistribute-delay <i>number</i>
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait

Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure router <i>named-item-64</i> ospf3 <i>number</i> unicast-import <i>boolean</i>
Tree	unicast-import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcep

Synopsis	Enter the pcep context
Context	configure router <i>named-item-64</i> pcep
Tree	pcep
Description	Commands in this context configure the PCEP command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pcc

Synopsis	Enable the pcc context
Context	configure router <i>named-item-64</i> pcep pcc
Tree	pcc
Description	Commands in this context configure the PCC command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the PCEP session element
Context	configure <i>router</i> <i>named-item-64</i> <i>pcep pcc admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dead-timer *number*

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

Synopsis	Configure dead timer
Context	configure <i>router</i> <i>named-item-64</i> <i>pcep pcc dead-timer number</i>
Tree	<i>dead-timer</i>
Range	1 to 255
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive *number*

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

Synopsis	Configure keepalive
Context	configure <i>router</i> <i>named-item-64</i> <i>pcep pcc keepalive number</i>
Tree	<i>keepalive</i>
Range	1 to 255
Units	seconds

Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-address *ipv4-unicast-address*

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

Synopsis	Local IPv4 address of the PCEP speaker
Context	configure router <i>named-item-64</i> pcep pcc local-address <i>ipv4-unicast-address</i>
Tree	local-address
Description	This command configures the local IPv4 address of the PCEP speaker.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-address-ipv6 *ipv6-unicast-address*

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

Synopsis	Local IPv6 address of the PCEP speaker
Context	configure router <i>named-item-64</i> pcep pcc local-address-ipv6 <i>ipv6-unicast-address</i>
Tree	local-address-ipv6
Description	This command configures the local IPv6 address of the PCEP speaker.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-srte-pce-init-lsps *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure max sr te pce init LSP
Context	configure router <i>named-item-64</i> pcep pcc max-srte-pce-init-lsps <i>number</i>
Tree	max-srte-pce-init-lsps
Range	0 to 8191
Default	8191
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce-associations

Synopsis	Enter the pce-associations context
Context	configure router <i>named-item-64</i> pcep pcc pce-associations
Tree	pce-associations
Description	Commands in this context configure PCE association groups.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diversity [[assoc-name](#)] *named-item*

Synopsis	Enter the diversity list instance
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item</i>
Tree	diversity
Description	Commands in this context create a named diversity association from which the parameters for the specified diversity association are configured.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[assoc-name](#)] *named-item*

Synopsis	Name of the association group
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item</i>
Tree	diversity
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

association-id *number*

Synopsis	Association ID for the diversity association group
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item</i> association-id <i>number</i>
Tree	association-id
Description	This command configures the diversity association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

association-source (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address of the diversity association
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item</i> association-source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	association-source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

disjointness-reference *boolean*

Synopsis	Configure P-flag in the disjointness configuration TLV
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item</i> disjointness-reference <i>boolean</i>
Tree	disjointness-reference
Description	<p>When configured to true, the router sets the P-flag in the disjointness configuration TLV. When the P-flag is set, it indicates that this LSP path is the reference path for the disjoint set of paths. The PCE must first compute the path of this LSP and then apply the requested disjointness type to compute the path of all other paths in the same diversity association ID.</p> <p>When configured to false, the router does not set the P-flag in the disjointness configuration TLV.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

disjointness-type *keyword*

Synopsis	Disjointness type for the association group
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item disjointness-type keyword</i>
Tree	disjointness-type
Options	strict, loose
Default	loose
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diversity-type *keyword*

Synopsis	Diversity type for the association group
Context	configure router <i>named-item-64</i> pcep pcc pce-associations diversity <i>named-item diversity-type keyword</i>
Tree	diversity-type
Description	This command configures the diversity type for the association group.
Options	none, link, node, srlg-link, srlg-node
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy [*assoc-name*] *named-item*

Synopsis	Enter the policy list instance
Context	configure router <i>named-item-64</i> pcep pcc pce-associations policy <i>named-item</i>
Tree	policy
Description	Commands in this context create a named policy association from which the parameters for the specified policy association are configured.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[assoc-name] *named-item*

Synopsis Name of the association group

Context **configure** **router** *named-item-64* **pcep** **pcc** **pce-associations** **policy** *named-item*

Tree **policy**

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

association-id *number*

Synopsis Association ID for the policy association group

Context **configure** **router** *named-item-64* **pcep** **pcc** **pce-associations** **policy** *named-item* **association-id** *number*

Tree **association-id**

Description This command configures the policy association ID. The user must specify an association ID.

Range 0 to 65535

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

association-source (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source IP address for the association

Context **configure** **router** *named-item-64* **pcep** **pcc** **pce-associations** **policy** *named-item* **association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **association-source**

Description This command configures the source IP address of the policy association.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

peer [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Destination IP address of a PCE peer in a PCEP session
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the PCC peer
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Keychain for TCP-AO authentication between PCC and PCE
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Preference value of the peer
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) preference <i>number</i>
Tree	preference
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-preference *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route preference to reach the PCE server
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) route-preference <i>keyword</i>

Tree	route-preference
Description	This command specifies the routing preference to reach the PCE server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the management routing instance are used to reach the PCE server before the in-band routes in the Base routing instance.
Options	inband, outband, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS client profile name assigned to this PCC peer
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-wait-timer *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time the PCC waits until declaring handshake failure
Context	configure router <i>named-item-64</i> pcep pcc peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) tls-wait-timer <i>number</i>
Tree	tls-wait-timer
Range	60 to 255
Units	seconds
Default	60
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

redelegation-timer *number*

Synopsis Configure redelegation-timer

Context **configure** [router](#) *named-item-64* [pcep pcc redelegation-timer](#) *number*

Tree [redelegation-timer](#)

Range 1 to 3600

Units seconds

Default 90

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

report-path-constraints *boolean*

Synopsis Include LSP path constraints in PCE report messages

Context **configure** [router](#) *named-item-64* [pcep pcc report-path-constraints](#) *boolean*

Tree [report-path-constraints](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

state-timer

Synopsis Enter the **state-timer** context

Context **configure** [router](#) *named-item-64* [pcep pcc state-timer](#)

Tree [state-timer](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

timer *number*

Synopsis Configure state-timer

Context **configure** [router](#) *named-item-64* [pcep pcc state-timer timer](#) *number*

Tree [timer](#)

Range	1 to 3600
Units	seconds
Default	180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timer-action *keyword*

Synopsis	State timer action remove/none
Context	configure router <i>named-item-64</i> pcep pcc state-timer timer-action <i>keyword</i>
Tree	timer-action
Options	none, remove
Default	remove
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-message-rate *number*

Synopsis	Configure unknown message rate
Context	configure router <i>named-item-64</i> pcep pcc unknown-message-rate <i>number</i>
Tree	unknown-message-rate
Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pce

Synopsis	Enable the pce context
Context	configure router <i>named-item-64</i> pcep pce
Tree	pce
Description	Commands in this context configure PCE command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the PCEP session element
Context	configure router <i>named-item-64</i> pcep pce admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Keychain for TCP-AO authentication between PCC and PCE
Context	configure router <i>named-item-64</i> pcep pce authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dead-timer *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure dead timer
Context	configure router <i>named-item-64</i> pcep pce dead-timer <i>number</i>
Tree	dead-timer
Range	1 to 255
Units	seconds
Default	120
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

keepalive *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	configure router <i>named-item-64</i> pcep pce keepalive <i>number</i>
Tree	keepalive
Range	1 to 255
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-address *ipv4-unicast-address*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	configure router <i>named-item-64</i> pcep pce local-address <i>ipv4-unicast-address</i>
Tree	local-address
Description	This command configures the local IPv4 address of the PCEP speaker.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-address-ipv6 *ipv6-unicast-address*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	configure router <i>named-item-64</i> pcep pce local-address-ipv6 <i>ipv6-unicast-address</i>
Tree	local-address-ipv6
Description	This command configures the local IPv6 address of the PCEP speaker.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-server-profile *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS server profile name assigned to this PCE
Context	configure router <i>named-item-64</i> pcep pce tls-server-profile <i>reference</i>
Tree	tls-server-profile
Reference	configure system security tls server-tls-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-wait-timer *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure tls-wait-timer
Context	configure router <i>named-item-64</i> pcep pce tls-wait-timer <i>number</i>
Tree	tls-wait-timer
Range	60 to 255
Units	seconds
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-message-rate *number*

Synopsis	Configure unknown message rate
Context	configure <i>router</i> <i>named-item-64</i> <i>pcep pce unknown-message-rate</i> <i>number</i>
Tree	<i>unknown-message-rate</i>
Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enable the pim context
Context	configure <i>router</i> <i>named-item-64</i> <i>pim</i>
Tree	<i>pim</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM
Context	configure <i>router</i> <i>named-item-64</i> <i>pim admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

apply-to *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
Context	configure <i>router</i> <i>named-item-64</i> <i>pim apply-to</i> <i>keyword</i>
Tree	<i>apply-to</i>
Options	ies, non-ies, all, none
Default	none

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enter the import context
Context	configure router <i>named-item-64</i> pim import
Tree	import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

join-policy *reference*

Synopsis	Character limit for policy name
Context	configure router <i>named-item-64</i> pim import join-policy <i>reference</i>
Tree	join-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register-policy *reference*

Synopsis	Character limit for policy name
Context	configure router <i>named-item-64</i> pim import register-policy <i>reference</i>
Tree	register-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [*interface-name*] *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> assert-period <i>number</i>
Tree	assert-period
Range	1 to 300
Default	60

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> bfd-liveness ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsm-check-rtr-alert boolean

Synopsis	Check router alert option in bootstrap messages received
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> bsm-check-rtr-alert <i>boolean</i>
Tree	bsm-check-rtr-alert

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> improved-assert <i>boolean</i>
Tree	improved-assert
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instant-prune-echo *boolean*

Synopsis	Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> instant-prune-echo <i>boolean</i>
Tree	instant-prune-echo
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group

Synopsis	Enter the monitor-oper-group context
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group
Tree	monitor-oper-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Operational group identifier
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group name <i>reference</i>
Tree	name
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group operation <i>keyword</i>
Tree	operation
Options	add, subtract, set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group priority-delta <i>number</i>
Tree	priority-delta
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv4 multicast <i>boolean</i>
Tree	multicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv6
Tree	ipv6
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context

Context **configure** [router](#) *named-item-64* [pim interface](#) *interface-name* [ipv6 monitor-oper-group](#)

Tree [monitor-oper-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

name *reference*

Synopsis Operational group identifier

Context **configure** [router](#) *named-item-64* [pim interface](#) *interface-name* [ipv6 monitor-oper-group](#) [name](#) *reference*

Tree [name](#)

Reference **configure** [service oper-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

operation *keyword*

Synopsis Operation performed when operational group is active

Context **configure** [router](#) *named-item-64* [pim interface](#) *interface-name* [ipv6 monitor-oper-group](#) [operation](#) *keyword*

Tree [operation](#)

Options add, subtract, set

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority-delta *number*

Synopsis Delta priority with operation when operational group is active

Context **configure** [router](#) *named-item-64* [pim interface](#) *interface-name* [ipv6 monitor-oper-group](#) [priority-delta](#) *number*

Tree [priority-delta](#)

Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> ipv6 multicast <i>boolean</i>
Tree	multicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> max-groups <i>number</i>
Tree	max-groups
Range	0 1 to 16000
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> multicast-senders <i>keyword</i>
Tree	multicast-senders
Options	auto, always, never
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	DR election priority for this interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> priority number
Tree	priority
Description	This command sets the priority value to elect the DR. The DR election priority is a 32-bit unsigned number and the numerically larger priority is always preferred.
Range	1 to 4294967295
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sticky-dr

Synopsis	Enable the sticky-dr context
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> sticky-dr
Tree	sticky-dr
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	DR election priority for this interface
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> sticky-dr priority number
Tree	priority
Range	1 to 4294967295
Default	1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

three-way-hello boolean

Synopsis	Allow three-way hello compatibility mode
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> three-way-hello <i>boolean</i>
Tree	three-way-hello

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tracking-support *boolean*

Synopsis	Allow upstream routers to explicitly track join membership
Context	configure router <i>named-item-64</i> pim interface <i>interface-name</i> tracking-support <i>boolean</i>
Tree	tracking-support
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> pim ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	configure router <i>named-item-64</i> pim ipv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure router <i>named-item-64</i> pim ipv4 rpf-table <i>keyword</i>

Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure router <i>named-item-64</i> pim ipv4 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register-message *ipv4-unicast-address*

Synopsis	Source IPv4 address for PIM register messages
Context	configure router <i>named-item-64</i> pim ipv4 source-address register-message <i>ipv4-unicast-address</i>
Tree	register-message
Description	<p>This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	configure router <i>named-item-64</i> pim ipv4 ssm-assert-compatible-mode <i>boolean</i>
Tree	ssm-assert-compatible-mode

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure router <i>named-item-64</i> pim ipv4 ssm-default-range <i>boolean</i>
Tree	ssm-default-range
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>named-item-64</i> pim ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	configure router <i>named-item-64</i> pim ipv6 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure router <i>named-item-64</i> pim ipv6 rpf-table <i>keyword</i>

Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure router <i>named-item-64</i> pim ipv6 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register-message *ipv6-unicast-address*

Synopsis	Source IPv6 address for PIM register messages
Context	configure router <i>named-item-64</i> pim ipv6 source-address register-message <i>ipv6-unicast-address</i>
Tree	register-message
Description	<p>This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure router <i>named-item-64</i> pim ipv6 ssm-default-range <i>boolean</i>
Tree	ssm-default-range
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mdt-spt *boolean*

Synopsis	Use SPT switchover for default MDT
Context	configure router <i>named-item-64</i> pim mdt-spt <i>boolean</i>
Tree	mdt-spt
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

non-dr-attract-traffic *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	configure router <i>named-item-64</i> pim non-dr-attract-traffic <i>boolean</i>
Tree	non-dr-attract-traffic
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim-ssm-scaling *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PIM-SSM scaling
Context	configure router <i>named-item-64</i> pim pim-ssm-scaling <i>boolean</i>
Tree	pim-ssm-scaling
Description	<p>When configured to true, this command enables an increase of PIM SSM (S,G) scaling to a maximum of 256000 per system. The total maximum multicast capacity is, however, constrained by the lowest-performance FP.</p> <p>When the maximum link capacity from the fabric to the lowest-performance FP is reached, the link to that FP is overloaded, resulting in packet loss for all FPs. This capacity constraint is independent of whether the lowest-performance FP has a receiver on it or not. If the multicast management chassis per-plane total capacity is configured to an explicit value larger than that supported by the lowest-performance FP, then IMPM</p>

believes that there is more plane capacity available than there actually is and the result is (S,G) packet loss instead of blackholing. By setting the multicast management chassis per-plane total capacity to **dynamic**, the system automatically sets the switch fabric multicast plane capacity to the minimum value supported by the fabric and all line cards in the system.

When PIM SSM scaling is enabled, the following multicast features are disabled:

- DM
- MoFRR
- JP policy
- InBand features (BIER and MLDP)
- Extranet
- ASM

When configured to **false**, there is no increase of PIM SSM (S,G) scaling.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp

Synopsis	Enter the rp context
Context	configure <i>router</i> <i>named-item-64</i> <i>pim</i> <i>rp</i>
Tree	<i>rp</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bootstrap

Synopsis	Enter the bootstrap context
Context	configure <i>router</i> <i>named-item-64</i> <i>pim</i> <i>rp</i> <i>bootstrap</i>
Tree	<i>bootstrap</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export reference

Synopsis	Character limit for policy name
Context	configure <i>router</i> <i>named-item-64</i> <i>pim</i> <i>rp</i> <i>bootstrap</i> <i>export</i> <i>reference</i>

Tree	export
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *reference*

Synopsis	Character limit for policy name
Context	configure router <i>named-item-64</i> pim rp bootstrap import reference
Tree	import
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>named-item-64</i> pim rp ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

anycast [[ipv4-address](#)] *ipv4-unicast-address* [rp-set-peer](#) *ipv4-unicast-address*

Synopsis	Add a list entry for anycast
Context	configure router <i>named-item-64</i> pim rp ipv4 anycast <i>ipv4-unicast-address</i> rp-set-peer <i>ipv4-unicast-address</i>
Tree	anycast
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[ipv4-address] *ipv4-unicast-address*

Synopsis Loopback IP address shared by routes in RP set

Context **configure** *router* *named-item-64* *pim rp ipv4 anycast ipv4-unicast-address rp-set-peer*
ipv4-unicast-address

Tree *anycast*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rp-set-peer *ipv4-unicast-address*

Synopsis Peer in the anycast RP-set

Context **configure** *router* *named-item-64* *pim rp ipv4 anycast ipv4-unicast-address rp-set-peer*
ipv4-unicast-address

Tree *anycast*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

auto-rp-discovery *boolean*

Synopsis Enable auto-RP discovery mode and auto-RP listener

Context **configure** *router* *named-item-64* *pim rp ipv4 auto-rp-discovery boolean*

Tree *auto-rp-discovery*

Description When configured to **true**, the system enables the auto-RP protocol in discovery mode and the auto-RP listener functionality.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure router <i>named-item-64</i> pim rp ipv4 bsr-candidate
Tree	bsr-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure router <i>named-item-64</i> pim rp ipv4 bsr-candidate address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure router <i>named-item-64</i> pim rp ipv4 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure router <i>named-item-64</i> pim rp ipv4 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 32

Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure router <i>named-item-64</i> pim rp ipv4 bsr-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

candidate *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	configure router <i>named-item-64</i> pim rp ipv4 candidate <i>boolean</i>
Tree	candidate
Description	<p>When configured to true, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.</p> <p>When configured to false, the candidate RP information is not specified.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mapping-agent *boolean*

Synopsis	Enable the mapping agent on the node
Context	configure router <i>named-item-64</i> pim rp ipv4 mapping-agent <i>boolean</i>
Tree	mapping-agent
Description	When configured to true , the mapping agent is enabled on the node. The auto-RP MA observes the auto-rp-announcement messages, selects the RP and generates the RP

discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure router named-item-64 pim rp ipv4 rp-candidate
Tree	rp-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Local RP address
Context	configure router named-item-64 pim rp ipv4 rp-candidate address <i>ipv4-unicast-address</i>
Tree	address
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure router named-item-64 pim rp ipv4 rp-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [ipv4-prefix] *ipv4-multicast-prefix*

Synopsis	Add a list entry for group-range
Context	configure router <i>named-item-64</i> pim rp ipv4 rp-candidate group-range <i>ipv4-multicast-prefix</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-prefix] *ipv4-multicast-prefix*

Synopsis	IPv4 address and prefix length
Context	configure router <i>named-item-64</i> pim rp ipv4 rp-candidate group-range <i>ipv4-multicast-prefix</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure router <i>named-item-64</i> pim rp ipv4 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Candidate RP priority
Context	configure router <i>named-item-64</i> pim rp ipv4 rp-candidate priority <i>number</i>
Tree	priority

Range	0 to 255
Default	192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure router <i>named-item-64</i> pim rp ipv4 static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [**ipv4-address**] *ipv4-unicast-address*

Synopsis	Enter the address list instance
Context	configure router <i>named-item-64</i> pim rp ipv4 static address <i>ipv4-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-address] *ipv4-unicast-address*

Synopsis	IPv4 address for the static RP
Context	configure router <i>named-item-64</i> pim rp ipv4 static address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-prefix [**ipv4-prefix**] *ipv4-multicast-prefix*

Synopsis	Add a list entry for group-prefix
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Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp</i> <i>ipv4 static address</i> <i>ipv4-unicast-address</i> <i>group-prefix</i> <i>ipv4-multicast-prefix</i>
Tree	<i>group-prefix</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-prefix] *ipv4-multicast-prefix*

Synopsis	IPv4 address and prefix length
Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp</i> <i>ipv4 static address</i> <i>ipv4-unicast-address</i> <i>group-prefix</i> <i>ipv4-multicast-prefix</i>
Tree	<i>group-prefix</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp</i> <i>ipv4 static address</i> <i>ipv4-unicast-address</i> <i>override</i> <i>boolean</i>
Tree	<i>override</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp</i> <i>ipv6</i>
Tree	<i>ipv6</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

anycast [ipv6-address] ipv6-unicast-address rp-set-peer ipv6-unicast-address

Synopsis	Add a list entry for anycast
Context	configure router <i>named-item-64</i> pim rp ipv6 anycast <i>ipv6-unicast-address</i> rp-set-peer <i>ipv6-unicast-address</i>
Tree	anycast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-unicast-address*

Synopsis	Loopback IP address shared by routes in RP set
Context	configure router <i>named-item-64</i> pim rp ipv6 anycast <i>ipv6-unicast-address</i> rp-set-peer <i>ipv6-unicast-address</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-set-peer *ipv6-unicast-address*

Synopsis	Peer in the anycast RP set
Context	configure router <i>named-item-64</i> pim rp ipv6 anycast <i>ipv6-unicast-address</i> rp-set-peer <i>ipv6-unicast-address</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure router <i>named-item-64</i> pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-unicast-address*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure router <i>named-item-64</i> pim rp ipv6 bsr-candidate address <i>ipv6-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure router <i>named-item-64</i> pim rp ipv6 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure router <i>named-item-64</i> pim rp ipv6 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure router <i>named-item-64</i> pim rp ipv6 bsr-candidate priority <i>number</i>
Tree	priority
Range	0 to 255

Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

embedded-rp

Synopsis	Enable the embedded-rp context
Context	configure router <i>named-item-64</i> pim rp ipv6 embedded-rp
Tree	embedded-rp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of embedded RP
Context	configure router <i>named-item-64</i> pim rp ipv6 embedded-rp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [[ipv6-prefix](#)] *ipv6-multicast-prefix*

Synopsis	Add a list entry for group-range
Context	configure router <i>named-item-64</i> pim rp ipv6 embedded-rp group-range <i>ipv6-multicast-prefix</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-multicast-prefix*

Synopsis	IPv6 address and prefix length
Context	configure router <i>named-item-64</i> pim rp ipv6 embedded-rp group-range <i>ipv6-multicast-prefix</i>

Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure router <i>named-item-64</i> pim rp ipv6 rp-candidate
Tree	rp-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-unicast-address*

Synopsis	Local RP address
Context	configure router <i>named-item-64</i> pim rp ipv6 rp-candidate address <i>ipv6-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure router <i>named-item-64</i> pim rp ipv6 rp-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [[ipv6-prefix](#)] *ipv6-multicast-prefix*

Synopsis	Add a list entry for group-range
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Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp ipv6 rp-candidate group-range ipv6-multicast-prefix</i>
Tree	<i>group-range</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**ipv6-prefix**] *ipv6-multicast-prefix*

Synopsis	IPv6 address and prefix length
Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp ipv6 rp-candidate group-range ipv6-multicast-prefix</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp ipv6 rp-candidate holdtime number</i>
Tree	<i>holdtime</i>
Range	5 to 255
Units	seconds
Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Candidate RP priority
Context	configure <i>router</i> <i>named-item-64</i> <i>pim rp ipv6 rp-candidate priority number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	192
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

static

Synopsis Enter the **static** context

Context **configure** [router](#) *named-item-64* [pim rp ipv6 static](#)

Tree [static](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address [[ipv6-address](#)] *ipv6-unicast-address*

Synopsis Enter the **address** list instance

Context **configure** [router](#) *named-item-64* [pim rp ipv6 static address](#) *ipv6-unicast-address*

Tree [address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[[ipv6-address](#)] *ipv6-unicast-address*

Synopsis Static IP address of the RP

Context **configure** [router](#) *named-item-64* [pim rp ipv6 static address](#) *ipv6-unicast-address*

Tree [address](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-prefix [[ipv6-prefix](#)] *ipv6-multicast-prefix*

Synopsis Add a list entry for **group-prefix**

Context **configure** [router](#) *named-item-64* [pim rp ipv6 static address](#) *ipv6-unicast-address* [group-prefix](#) *ipv6-multicast-prefix*

Tree [group-prefix](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ipv6-prefix] *ipv6-multicast-prefix*

Synopsis	IPv6 address and prefix length
Context	configure router <i>named-item-64</i> pim rp ipv6 static address <i>ipv6-unicast-address</i> group-prefix <i>ipv6-multicast-prefix</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure router <i>named-item-64</i> pim rp ipv6 static address <i>ipv6-unicast-address</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpfv

Synopsis	Enter the rpfv context
Context	configure router <i>named-item-64</i> pim rpfv
Tree	rpfv
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

core *boolean*

Synopsis	Include proxy RPF vector for core
Context	configure router <i>named-item-64</i> pim rpfv core <i>boolean</i>
Tree	core
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mvpn *boolean*

Synopsis Include proxy RPF vector for Inter-AS Rosen MVPN

Context **configure** *router* *named-item-64* *pim rpfv mvpn boolean*

Tree *mvpn*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

spt-switchover [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **spt-switchover** list instance

Context **configure** *router* *named-item-64* *pim spt-switchover* (*ipv4-prefix* | *ipv6-prefix*)

Tree *spt-switchover*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address and mask length

Context **configure** *router* *named-item-64* *pim spt-switchover* (*ipv4-prefix* | *ipv6-prefix*)

Tree *spt-switchover*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

threshold (*number* | *keyword*)

Synopsis SPT switchover threshold

Context **configure** *router* *named-item-64* *pim spt-switchover* (*ipv4-prefix* | *ipv6-prefix*) **threshold** (*number* | *keyword*)

Tree *threshold*

Range 1 to 4294967294

Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-groups

Synopsis	Enter the ssm-groups context
Context	configure router <i>named-item-64</i> pim ssm-groups
Tree	ssm-groups
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [ip-prefix] (ipv4-prefix | ipv6-prefix)

Synopsis	Add a list entry for group-range
Context	configure router <i>named-item-64</i> pim ssm-groups group-range (ipv4-prefix ipv6-prefix)
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (ipv4-prefix | ipv6-prefix)

Synopsis	IP address and mask length
Context	configure router <i>named-item-64</i> pim ssm-groups group-range (ipv4-prefix ipv6-prefix)
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius

Synopsis	Enter the radius context
Context	configure router <i>named-item-64</i> radius

Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[name](#)] *named-item*

Synopsis	Enter the server list instance
Context	configure router <i>named-item-64</i> radius server <i>named-item</i>
Tree	server
Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	External RADIUS server name
Context	configure router <i>named-item-64</i> radius server <i>named-item</i>
Tree	server
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> accept-coa <i>boolean</i>
Tree	accept-coa
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

acct-port *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> acct-port <i>number</i>
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auth-port *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> auth-port <i>number</i>
Tree	auth-port
Range	1 to 65535
Default	1812
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

insert-message-authenticator *boolean*

Synopsis	Insert Message-Authenticator in Access-Request
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> insert-message-authenticator <i>boolean</i>
Tree	insert-message-authenticator
Description	When configured to true , the router inserts a Message-Authenticator attribute as the first attribute in Access-Request messages.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> pending-requests-limit <i>number</i>
Tree	pending-requests-limit
Range	1 to 4096
Default	4096
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

require-message-authenticator *boolean*

Synopsis	Require Message-Authenticator in Access-Request reply
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> require-message-authenticator <i>boolean</i>
Tree	require-message-authenticator
Description	When configured to true , the router silently drops responses to Access-Requests without a Message-Authenticator attribute.

Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

secret encrypted-leaf

Synopsis	Secret key associated with this RADIUS server
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> secret encrypted-leaf
Tree	secret
Description	This command specifies the secret key associated with this RADIUS server in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile reference

Synopsis	Use the TLS client profile for RADIUS over TLS
Context	configure router <i>named-item-64</i> radius server <i>named-item</i> tls-client-profile reference
Tree	tls-client-profile
Description	When configured, the router uses the TLS client profile to encrypt RADIUS communication and RADIUS messages are sent using TLS.
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

rip

Synopsis	Enable the rip context
Context	configure router <i>named-item-64</i> rip
Tree	rip
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the RIP instance

Context **configure** *router* *named-item-64* *rip* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis Authentication password passed between RIP neighbors

Context **configure** *router* *named-item-64* *rip* **authentication-key** *encrypted-leaf*

Tree [authentication-key](#)

Description This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication password from the configuration and disables authentication.

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 102

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-type *keyword*

Synopsis Authentication type used between RIP neighbors

Context **configure** *router* *named-item-64* *rip* **authentication-type** *keyword*

Tree [authentication-type](#)

Description This command sets the type of authentication to be used between RIP neighbors.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.

Options	none, password, md5, md20
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>named-item-64</i> rip bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>named-item-64</i> rip check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> rip description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure router <i>named-item-64</i> rip export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure router <i>named-item-64</i> rip export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>named-item-64</i> rip export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	configure router <i>named-item-64</i> rip export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-name](#)] *named-item*

Synopsis	Enter the group list instance
Context	configure router <i>named-item-64</i> rip group <i>named-item</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item*

Synopsis	RIP group name
Context	configure router <i>named-item-64</i> rip group <i>named-item</i>
Tree	group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, the authentication password is removed from the configuration and authentication is disabled.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 102
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p>

	When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [**interface-name**] *interface-name*

Synopsis	Enter the neighbor list instance
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i>
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Neighbor added through the interface to the RIP group
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i>
Tree	neighbor
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>

String length	1 to 102
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> check-zero <i>boolean</i>

Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> send <i>keyword</i>
Tree	send

Options	none, version-1, broadcast, multicast, unicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-address [*address*] *ipv4-unicast-address*

Synopsis	Add a list entry for unicast-address
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Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> unicast-address <i>ipv4-unicast-address</i>
Tree	unicast-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis	Unicast address for the neighbor
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> neighbor <i>interface-name</i> unicast-address <i>ipv4-unicast-address</i>
Tree	unicast-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIP version and method used to send RIP updates
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> send <i>keyword</i>
Tree	send
Options	none, version-1, broadcast, multicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush number

Synopsis	RIP flush timer
Context	configure <i>router</i> <i>named-item-64</i> <i>rip group</i> <i>named-item</i> timers flush <i>number</i>

Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>named-item-64</i> rip group <i>named-item</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure router <i>named-item-64</i> rip import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the RIP message
Context	configure router <i>named-item-64</i> rip message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>named-item-64</i> rip metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIP
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Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> <i>metric-out</i> <i>number</i>
Tree	<i>metric-out</i>
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> <i>preference</i> <i>number</i>
Tree	<i>preference</i>
Range	1 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> <i>receive</i> <i>keyword</i>
Tree	<i>receive</i>
Options	version-1, version-2, both, none
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> <i>send</i> <i>keyword</i>
Tree	<i>send</i>
Options	none, version-1, broadcast, multicast
Default	broadcast

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure <i>router</i> <i>named-item-64</i> <i>rip</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200

Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>named-item-64</i> rip timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>named-item-64</i> rip timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ripng

Synopsis	Enable the ripng context
Context	configure router <i>named-item-64</i> ripng
Tree	ripng

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	configure router <i>named-item-64</i> ripng admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>named-item-64</i> ripng bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>named-item-64</i> ripng check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** [router](#) *named-item-64* [ripng](#) [description](#) *description*
Tree [description](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

export-limit

Synopsis Enable the **export-limit** context
Context **configure** [router](#) *named-item-64* [ripng](#) [export-limit](#)
Tree [export-limit](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent
Context **configure** [router](#) *named-item-64* [ripng](#) [export-limit](#) [log-percent](#) *number*
Tree [log-percent](#)
Range 1 to 100
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

number *number*

Synopsis Maximum routes or prefixes exported from route table
Context **configure** [router](#) *named-item-64* [ripng](#) [export-limit](#) [number](#) *number*
Tree [number](#)

Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	configure router <i>named-item-64</i> ripng export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-name](#)] *named-item*

Synopsis	Enter the group list instance
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item*

Synopsis	RIP group name
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i>
Tree	group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RIPvng neighbor interface group
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>

Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [*interface-name*] *interface-name*

Synopsis	Enter the neighbor list instance
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i>
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Neighbor added to the RIPng group through the interface
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i>
Tree	neighbor
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> export-policy <i>reference</i>
Tree	export-policy

Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> receive <i>keyword</i>
Tree	receive

Options	none, ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> send <i>keyword</i>
Tree	send
Options	none, ripng, unicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> timers
Tree	timers
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

flush *number*

Synopsis RIP flush timer

Context **configure** **router** *named-item-64* **ripng group** *named-item* **neighbor** *interface-name*
timers flush *number*

Tree **flush**

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

timeout *number*

Synopsis RIP timeout timer

Context **configure** **router** *named-item-64* **ripng group** *named-item* **neighbor** *interface-name*
timers timeout *number*

Tree **timeout**

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** **router** *named-item-64* **ripng group** *named-item* **neighbor** *interface-name*
timers update *number*

Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-address [[address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for unicast-address
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> unicast-address <i>ipv6-unicast-address</i>
Tree	unicast-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv6-unicast-address*

Synopsis	Unicast address for the neighbor
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> neighbor <i>interface-name</i> unicast-address <i>ipv6-unicast-address</i>
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive keyword

Synopsis	Accepted version on received packets
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> receive <i>keyword</i>
Tree	receive
Options	none, ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIPng version and method used to send RIPng updates
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> send <i>keyword</i>
Tree	send
Options	none, ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>named-item-64</i> ripng group <i>named-item</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
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Context	configure <i>router</i> <i>named-item-64</i> <i>ripng group</i> <i>named-item</i> <i>timers</i>
Tree	<i>timers</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng group</i> <i>named-item</i> <i>timers</i> <i>flush</i> <i>number</i>
Tree	<i>flush</i>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng group</i> <i>named-item</i> <i>timers</i> <i>timeout</i> <i>number</i>
Tree	<i>timeout</i>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
----------	--

Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>group</i> <i>named-item</i> <i>timers</i> <i>update</i> <i>number</i>
Tree	<i>update</i>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>import-policy</i> <i>reference</i>
Tree	<i>import-policy</i>
Reference	configure <i>policy-options</i> <i>policy-statement</i> <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>message-size</i> <i>number</i>
Tree	<i>message-size</i>
Range	25 to 255
Default	25
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>metric-in</i> <i>number</i>
Tree	<i>metric-in</i>

Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>named-item-64</i> ripng metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure router <i>named-item-64</i> ripng preference <i>number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>named-item-64</i> ripng receive <i>keyword</i>
Tree	receive
Options	none, ripng
Default	ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIPng version and method used to send RIPng updates
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>send</i> <i>keyword</i>
Tree	<i>send</i>
Options	none, ripng
Default	ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>split-horizon</i> <i>boolean</i>
Tree	<i>split-horizon</i>
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure <i>router</i> <i>named-item-64</i> <i>ripng</i> <i>timers</i>
Tree	<i>timers</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure router <i>named-item-64</i> ripng timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>named-item-64</i> ripng timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>named-item-64</i> ripng timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *router-id*

Synopsis	Unique router ID for the router in the AS
Context	configure router <i>named-item-64</i> router-id <i>router-id</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>named-item-64</i> rsvp
Tree	rsvp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RSVP
Context	configure router <i>named-item-64</i> rsvp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-over-bypass *boolean*

Synopsis	Enable MD5 authentication over bypass LSP of PLR and MP
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Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp authentication-over-bypass</i> <i>boolean</i>
Tree	<i>authentication-over-bypass</i>
Description	<p>When configured to true, this command configures the MD5 authentication over the bypass LSP of all Point of Local Repairs (PLRs) and Merge Points (MPs) on the router. Only enable this command when the TE interfaces in the RSVP-TE network use the same MD5 authentication parameters.</p> <p>When a Point of Local Repair (PLR) activates a bypass LSP towards a Merge Point (MP), by default, the INTEGRITY object corresponding to the bypass LSP interface is not added to a transmitted RSVP message except for packets of routed RSVP messages (Resv, Srefresh, and ACK), and only when the packet is intended for a bypass LSP endpoint (PLR or MP) that is a directly connected neighbor.</p> <p>When this command is enabled, the INTEGRITY object of the interface corresponding to the bypass LSP is added to a transmitted RSVP message regardless of whether the bypass LSP endpoint (PLR or MP) is a directly connected RSVP neighbor. The INTEGRITY object is included with the following RSVP messages: Path, PathTear, PathErr, Resv, ResvTear, ResvErr, Srefresh, and ACK.</p> <p>In all cases, an RSVP message received from a PLR or a MP (sender address in the SenderTemplate or FilterSpec is different from an Extended Tunnel Id in a Session Object), and which includes the INTEGRITY object is authenticated against the bypass LSP interface. An RSVP message received from a PLR or MP without the INTEGRITY object is also accepted.</p> <p>When configured to false, the router disables MD5 authentication over bypass LSP of the PLRs and MPs.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

diffserv-te

Synopsis	Enable the diffserv-te context
Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp diffserv-te</i>
Tree	<i>diffserv-te</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admission-control-model *keyword*

Synopsis	Parameters for the DiffServ TE node
Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp diffserv-te admission-control-model</i> <i>keyword</i>
Tree	<i>admission-control-model</i>

Options	mam, rdm
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type-bw

Synopsis	Enter the class-type-bw context
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw
Tree	class-type-bw
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct0 number

Synopsis	RSVP interface bandwidth percentage for class type 0
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct0 <i>number</i>
Tree	ct0
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct1 number

Synopsis	RSVP interface bandwidth percentage for class type 1
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct1 <i>number</i>
Tree	ct1
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct2 number

Synopsis	RSVP interface bandwidth percentage for class type 2
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct2 <i>number</i>
Tree	ct2
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct3 number

Synopsis	RSVP interface bandwidth percentage for class type 3
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct3 <i>number</i>
Tree	ct3
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct4 number

Synopsis	RSVP interface bandwidth percentage for class type 4
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct4 <i>number</i>
Tree	ct4
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct5 number

Synopsis	RSVP interface bandwidth percentage for class type 5
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct5 <i>number</i>
Tree	ct5

Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct6 number

Synopsis	RSVP interface bandwidth percentage for class type 6
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct6 <i>number</i>
Tree	ct6
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct7 number

Synopsis	RSVP interface bandwidth percentage for class type 7
Context	configure router <i>named-item-64</i> rsvp diffserv-te class-type-bw ct7 <i>number</i>
Tree	ct7
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc [[fc-name](#)] *keyword*

Synopsis	Enter the fc list instance
Context	configure router <i>named-item-64</i> rsvp diffserv-te fc <i>keyword</i>
Tree	fc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[fc-name] keyword

Synopsis	Forwarding class for this mapping
Context	configure router <i>named-item-64</i> rsvp diffserv-te fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type number

Synopsis	Diff-Serv Class Type (CT) for an LSP
Context	configure router <i>named-item-64</i> rsvp diffserv-te fc <i>keyword</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

te-class [te-class-number] number

Synopsis	Enter the te-class list instance
Context	configure router <i>named-item-64</i> rsvp diffserv-te te-class <i>number</i>
Tree	te-class
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[te-class-number] *number*

Synopsis	TE class number
Context	configure router <i>named-item-64</i> rsvp diffserv-te te-class <i>number</i>
Tree	te-class
Range	0 to 7
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

class-type *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Class type (CT) associated with the TE class
Context	configure router <i>named-item-64</i> rsvp diffserv-te te-class <i>number</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TE class priority
Context	configure router <i>named-item-64</i> rsvp diffserv-te te-class <i>number</i> priority <i>number</i>
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

entropy-label-capability *boolean*

Synopsis Allow receiving and processing of the entropy label and ELI on incoming packets of RSVP LSPs

Context **configure** [router](#) *named-item-64* [rsvp](#) **entropy-label-capability** *boolean*

Tree [entropy-label-capability](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enter the **graceful-restart** context

Context **configure** [router](#) *named-item-64* [rsvp](#) **graceful-restart**

Tree [graceful-restart](#)

Description Commands in this context configure the local values for the recovery and the restart intervals used in the RSVP Graceful Restart helper.

The values are configured globally in RSVP but separate instances of the timers are applied to each RSVP interface that has the RSVP Graceful Restart helper enabled.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-recovery *number*

Synopsis Maximum recovery interval

Context **configure** [router](#) *named-item-64* [rsvp](#) **graceful-restart** **max-recovery** *number*

Tree [max-recovery](#)

Range 1 to 1800

Units seconds

Default 300

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-restart *number*

Synopsis	Maximum restart interval
Context	configure router <i>named-item-64</i> rsvp graceful-restart max-restart <i>number</i>
Tree	max-restart
Range	1 to 300
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-shutdown *boolean*

Synopsis	Initiate a graceful shutdown of all RSVP interfaces on the node
Context	configure router <i>named-item-64</i> rsvp graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

implicit-null-label *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null option for all RSVP LSPs
Context	configure router <i>named-item-64</i> rsvp implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-node-id-in-rro *boolean*

Synopsis	Include the node-id sub-object in the RRO (Record Route Object) on the RSVP instance
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Context	configure router <i>named-item-64</i> rsvp include-node-id-in-rro <i>boolean</i>
Tree	include-node-id-in-rro
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i>
Tree	interface
Description	<p>Commands in this context configure the attributes of the RSVP protocol support on an IP interface. RSVP commands are not executed on an IP interface if RSVP is not enabled.</p> <p>The RSVP interface must be administratively disabled before it can be deleted.</p> <p>A corresponding MPLS interface must also be configured. The RSVP interface cannot be deleted without also deleting the MPLS interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *reference*

Synopsis	Index for router RSVP interface
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i>
Tree	interface
Reference	configure router <i>named-item-64</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RSVP on the IP interface
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication or hash key string
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> authentication-key encrypted-leaf
Tree	authentication-key
Description	<p>This command configures the authentication key for use between RSVP neighbors to authenticate RSVP messages. Authentication uses the MD5 message-based digest.</p> <p>When enabled on an RSVP interface, authentication of RSVP messages operates in both directions of the interface. A router maintains a security association using one authentication key for each interface to an RSVP neighbor.</p> <p>An RSVP neighbor transmits an authenticating digest of the RSVP message that is computed using the shared authentication key and a keyed-hash algorithm. The message digest is included in an INTEGRITY object, which also contains a flags field, a key identifier field, and a sequence number field. An RSVP neighbor uses the key together with the authentication algorithm to process received RSVP messages. The RSVP MD5 authentication complies to the procedures for RSVP message generation in RFC 2747, <i>RSVP Cryptographic Authentication</i>.</p> <p>The MD5 implementation does not support the authentication challenge procedures in RFC 2747.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 102
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> authentication-keychain reference
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [bfd-liveness](#) *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

class-type-bw

Synopsis Enable the **class-type-bw** context

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#)

Tree [class-type-bw](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ct0 *number*

Synopsis Percentage of link bandwidth for class type (CT) 0

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#) [ct0](#) *number*

Tree [ct0](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ct1 *number*

Synopsis Percentage of link bandwidth for class type (CT) 1

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#) [ct1](#) *number*

Tree [ct1](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ct2 number

Synopsis Percentage of link bandwidth for class type (CT) 2
Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#) **ct2** *number*
Tree [ct2](#)
Range 0 to 100
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ct3 number

Synopsis Percentage of link bandwidth for class type (CT) 3
Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#) **ct3** *number*
Tree [ct3](#)
Range 0 to 100
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ct4 number

Synopsis Percentage of link bandwidth for class type (CT) 4
Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#) **ct4** *number*
Tree [ct4](#)
Range 0 to 100
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ct5 number

Synopsis Percentage of link bandwidth for class type (CT) 5
Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [class-type-bw](#) **ct5** *number*
Tree [ct5](#)
Range 0 to 100

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct6 number

Synopsis	Percentage of link bandwidth for class type (CT) 6
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> class-type-bw ct6 <i>number</i>
Tree	ct6
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ct7 number

Synopsis	Percentage of link bandwidth for class type (CT) 7
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> class-type-bw ct7 <i>number</i>
Tree	ct7
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart-helper-mode boolean

Synopsis	Enable Graceful Restart helper for the RSVP interface
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> graceful-restart-helper-mode <i>boolean</i>
Tree	graceful-restart-helper-mode
Description	When configured to true , the system enables the RSVP Graceful Restart helper.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-shutdown boolean

Synopsis	Initiate a graceful shutdown of RSVP interface
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Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between RSVP Hello messages
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 60
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

implicit-null-label *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null label value for all LSPs
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

refresh-reduction

Synopsis	Enable the refresh-reduction context
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> refresh-reduction
Tree	refresh-reduction
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

reliable-delivery *boolean*

Synopsis Reliable delivery of RSVP messages over the RSVP interface

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [refresh-reduction reliable-delivery](#) *boolean*

Tree [reliable-delivery](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

subscription *number*

Synopsis Percentage of the link bandwidth to use for reservation

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [subscription](#) *number*

Tree [subscription](#)

Range 0 to 1000

Default 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

te-down-threshold

Synopsis Enable the **te-down-threshold** context

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [te-down-threshold](#)

Tree [te-down-threshold](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

value *number*

Synopsis Threshold level per interface

Context **configure** [router](#) *named-item-64* [rsvp interface](#) *reference* [te-down-threshold](#) [value](#) *number*

Tree [value](#)

Range	0 to 100
Max. instances	16
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

te-up-threshold

Synopsis	Enable the te-up-threshold context
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> te-up-threshold
Tree	te-up-threshold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Threshold level per interface
Context	configure router <i>named-item-64</i> rsvp interface <i>reference</i> te-up-threshold value <i>number</i>
Tree	value
Range	0 to 100
Max. instances	16
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keep-multiplier *number*

Synopsis	Value for the keep-multiplier to declare a reservation or neighbor as down
Context	configure router <i>named-item-64</i> rsvp keep-multiplier <i>number</i>
Tree	keep-multiplier

Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

msg-pacing

Synopsis	Enable the msg-pacing context
Context	configure router <i>named-item-64</i> rsvp msg-pacing
Tree	msg-pacing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-burst *number*

Synopsis	Maximum RSVP messages that are sent over a specified period when message pacing is enabled
Context	configure router <i>named-item-64</i> rsvp msg-pacing max-burst <i>number</i>
Tree	max-burst
Range	100 to 1000
Default	650
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

period *number*

Synopsis	Time for RSVP message pacing
Context	configure router <i>named-item-64</i> rsvp msg-pacing period <i>number</i>
Tree	period
Range	100 to 1000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

p2p-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for P2P paths
Context	configure router <i>named-item-64</i> rsvp p2p-merge-point-abort-timer <i>number</i>
Tree	p2p-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preemption-timer *number*

Synopsis	Preemption timer for the MPLS instance
Context	configure router <i>named-item-64</i> rsvp preemption-timer <i>number</i>
Tree	preemption-timer
Range	0 to 1800
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rapid-retransmit-time *number*

Synopsis	Rapid retransmission interval to reliably deliver RSVP messages
Context	configure router <i>named-item-64</i> rsvp rapid-retransmit-time <i>number</i>
Tree	rapid-retransmit-time
Range	1 to 100
Units	deciseconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rapid-retry-limit *number*

Synopsis	Rapid retry limit to reliably deliver RSVP messages
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Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp</i> <i>rapid-retry-limit</i> <i>number</i>
Tree	<i>rapid-retry-limit</i>
Range	1 to 6
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

refresh-reduction-over-bypass *boolean*

Synopsis	Enable refresh reduction capabilities over tunnels
Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp</i> <i>refresh-reduction-over-bypass</i> <i>boolean</i>
Tree	<i>refresh-reduction-over-bypass</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

refresh-time *number*

Synopsis	Interval between refresh messages
Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp</i> <i>refresh-time</i> <i>number</i>
Tree	<i>refresh-time</i>
Range	1 to 65535
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

te-down-threshold *number*

Synopsis	Value for the te-down-threshold
Context	configure <i>router</i> <i>named-item-64</i> <i>rsvp</i> <i>te-down-threshold</i> <i>number</i>
Tree	<i>te-down-threshold</i>
Range	0 to 100
Max. instances	16

Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

te-threshold-update

Synopsis	Enable the te-threshold-update context
Context	configure router <i>named-item-64</i> rsvp te-threshold-update
Tree	te-threshold-update
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

on-cac-failure *boolean*

Synopsis	CAC (Call Admission Control) failure-triggered IGP update
Context	configure router <i>named-item-64</i> rsvp te-threshold-update on-cac-failure <i>boolean</i>
Tree	on-cac-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-timer *number*

Synopsis	Timer-based IGP updates
Context	configure router <i>named-item-64</i> rsvp te-threshold-update update-timer <i>number</i>
Tree	update-timer
Range	1 to 300
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

te-up-threshold *number*

Synopsis	Value for the te-up-threshold
Context	configure router <i>named-item-64</i> rsvp te-up-threshold <i>number</i>

Tree	te-up-threshold
Range	0 to 100
Max. instances	16
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>named-item-64</i> segment-routing
Tree	segment-routing
Description	Commands in this context configure protocol-independent options for segment routing.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maintenance-policy [[policy-name](#)] *named-item*

Synopsis	Enter the maintenance-policy list instance
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i>
Tree	maintenance-policy
Description	Commands in this context configure a named maintenance policy that can be applied to SR policy candidate paths that are either statically configured or imported via BGP.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[policy-name](#)] *named-item*

Synopsis	Maintenance policy name
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i>
Tree	maintenance-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the maintenance policy
Context	configure <i>router</i> <i>named-item-64</i> <i>segment-routing maintenance-policy</i> <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command sets the administrative state of the maintenance policy.</p> <p>A maintenance policy must be administratively disabled to change any of the parameters.</p> <p>When a maintenance template is administratively disabled, all applicable candidate paths are removed from the data path.</p>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable seamless BFD for segment lists of candidate path
Context	configure <i>router</i> <i>named-item-64</i> <i>segment-routing maintenance-policy</i> <i>named-item</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables seamless BFD on every segment list of an SR policy candidate path to which the maintenance policy is applied. The BFD template configures the parameters for the BFD session.</p> <p>When configured to false, seamless BFD is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BFD template to be used by seamless BFD
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i> bfd-template <i>reference</i>
Tree	bfd-template
Description	This command references a named BFD template to be used by seamless BFD. A BFD template must exist on the system before being referenced from a maintenance policy. The template specifies parameters that are used by the BFD session, such as the minimum transmit and receive control packet timer intervals.
Reference	configure bfd bfd-template <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down-timer *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold down timer for SR policy candidate paths
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i> hold-down-timer <i>number</i>
Tree	hold-down-timer
Description	<p>This command configures the hold down timer for the maintenance policy. The purpose of the timer is to prevent bouncing of the SR policy path state if S-BFD sessions associated with the segment lists flap, causing the threshold to be repeatedly crossed in a short period of time.</p> <p>The timer is started when the number of up S-BFD sessions drops below the threshold. The SR policy path is not considered to be up again until the hold down timer has expired and the number of up S-BFD sessions reaches or exceeds the threshold and the internal hold timer is not running.</p> <p>If the revert timer is also configured, the revert timer is not started until after the number of up S-BFD sessions equals or exceeds the threshold and the hold down timer for the primary candidate path has expired.</p>
Range	0 to 5000

Units	deciseconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Protection mode for SR policy candidate paths
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i> mode <i>keyword</i>
Tree	mode
Description	This command specifies the data path programming and protection mechanism for SR policy candidate paths to which the maintenance policy is applied.
Options	none, ecmp-protected, linear
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

return-path-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i> return-path-label <i>number</i>
Tree	return-path-label
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p>

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-timer *number*

Synopsis	Revert timer for SR policy candidate paths
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i> revert-timer <i>number</i>
Tree	revert-timer
Description	This command configures the revert timer for SR Policy candidate paths. The revert timer is started when the primary path recovers (the number of S-BFD sessions that are up equals or exceeds the threshold value and the hold down timer has expired). When the timer expires, the system reverts to the primary path.
Range	0 to 4320
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum number of up S-BFD sessions for up path status
Context	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i> threshold <i>number</i>
Tree	threshold
Description	This command configures the minimum number of S-BFD sessions that must be up for the SR policy candidate path to be considered up. If the number of up sessions is below this threshold value, the policy candidate path is marked as BFD degraded by the system. This command is only valid in the ecmp-protected mode.
Range	1 to 32

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-mpls

Synopsis	Enter the sr-mpls context
Context	configure router <i>named-item-64</i> segment-routing sr-mpls
Tree	sr-mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-sids [[interface-name](#)] *reference*

Synopsis	Enter the prefix-sids list instance
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i>
Tree	prefix-sids
Description	Commands in this context configure the prefix SIDs for an interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[interface-name\]](#) *reference*

Synopsis	Loopback interface name that owns prefix to advertise
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i>
Tree	prefix-sids
Reference	configure router <i>named-item-64</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo [[flex-algo-id](#)] *number*

Synopsis	Enter the flex-algo list instance
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Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> flex-algo <i>number</i>
Tree	flex-algo
Max. instances	7
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ipv4-sid

Synopsis	Enable the ipv4-sid context
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> flex-algo <i>number</i> ipv4-sid
Tree	ipv4-sid
Description	Commands in this context configure IPv4 SIDs associated with the flexible algorithm instances on the shared loopback interfaces used with IS-IS or OSPF.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for the interface
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> flex-algo <i>number</i> ipv4-sid index <i>number</i>
Tree	index
Range	0 to 4294967295

Notes	The following elements are part of a choice: index or label .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference flex-algo</i> <i>number ipv4-sid label number</i>
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: index or label .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ipv6-sid

Synopsis	Enable the ipv6-sid context
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference flex-algo</i> <i>number ipv6-sid</i>
Tree	ipv6-sid
Description	Commands in this context configure IPv6 SIDs associated with the flexible algorithm instances on the shared loopback interfaces used with IS-IS or OSPF.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for the interface
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference flex-algo</i> <i>number ipv6-sid index number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

label number

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> flex-algo number ipv6-sid label number
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: index or label .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ipv4-sid

Synopsis	Enable the ipv4-sid context
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid
Tree	ipv4-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index number

Synopsis	Node SID index for the interface
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid index number
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label number

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid label number
Tree	label

Range	32 to 1048575
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-sid

Synopsis	Enable the ipv6-sid context
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv6-sid
Tree	ipv6-sid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

index *number*

Synopsis	Node SID index for the interface
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv6-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv6-sid label <i>number</i>
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: index or label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

node-sid *boolean*

Synopsis	Assign a node SID to the prefix referencing the router
Context	configure router <i>named-item-64</i> segment-routing sr-mpls prefix-sids <i>reference</i> node-sid <i>boolean</i>
Tree	node-sid
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policies

Synopsis	Enter the sr-policies context
Context	configure router <i>named-item-64</i> segment-routing sr-policies
Tree	sr-policies
Description	Commands in this context configure SR policies. An SR policy specifies the traffic to be matched by the policy and actions to take on the matched traffic by applying the instructions encoded in one or more segment lists.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of segment routing policies
Context	configure router <i>named-item-64</i> segment-routing sr-policies admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reserved-label-block *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved local block for segment routing policies
Context	configure router <i>named-item-64</i> segment-routing sr-policies reserved-label-block reference
Tree	reserved-label-block
Reference	configure router <i>named-item-64</i> mpls-labels reserved-label-block <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-policy [[name](#)] *named-item-64*

Synopsis	Enter the static-policy list instance
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i>
Tree	static-policy
Description	Commands in this context configure an SR policy. The resulting SR policy is targeted for local installation or propagation by BGP to another router.
Max. instances	32768
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item-64*

Synopsis	Name of the static SR policy
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i>
Tree	static-policy
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of segment routing static policy
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Context	configure <i>router</i> <i>named-item-64</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>named-item-64</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

binding-sid *number*

Synopsis	Binding Segment ID for SR policy to upstream routers
Context	configure <i>router</i> <i>named-item-64</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>named-item-64</i> <i>binding-sid</i> <i>number</i>
Tree	<i>binding-sid</i>
Description	This command associates a B-SID with a statically defined SR policy. This is a mandatory command to enable the SR policy. The B-SID label must be an available label in the reserved label block range.
Range	32 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Color value for static policy
Context	configure <i>router</i> <i>named-item-64</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>named-item-64</i> <i>color</i> <i>number</i>
Tree	<i>color</i>
Description	This command configures a color value to associate with a statically defined segment-routing policy. This is a mandatory command to enable the SR policy.
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

distinguisher *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique value for a policy
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> distinguisher <i>number</i>
Tree	distinguisher
Description	<p>This command configures a distinguisher value to associate with a statically defined SR policy. This is a mandatory command for non-local SR policies. Every non-local SR policy must have a unique distinguisher value.</p> <p>When a non-local static SR policy is imported into BGP and originated as a BGP route, the configured distinguisher value is copied into the NLRI of the route.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination of the source-routed path
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Description	<p>This command associates an IPv4 or IPv6 endpoint address with a statically defined SR policy. This association is mandatory when enabling an SR policy.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

head-end (*ipv4-address-no-zone | ipv6-address-no-zone | keyword*)

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Head-end address for this static policy
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> head-end (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>)
Tree	head-end
Description	This command associates a head-end location with a statically defined SR policy. The head end identifies the target router to install the policy. This is a mandatory command for enabling the SR policy.
Options	local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maintenance-policy *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policy name
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> maintenance-policy <i>reference</i>
Tree	maintenance-policy
Reference	configure router <i>named-item-64</i> segment-routing maintenance-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference value of this static policy
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Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> preference <i>number</i>
Tree	preference
Description	This command configures a preference value to associate with a statically defined SR policy. When there are multiple policies for the same (color, endpoint) combination that are targeted for local installation, only one is selected as the active path for the (color, endpoint). In this selection process, which considers both static local policies and BGP-signaled policies, the policy with the highest preference value is preferred over all policies with a lower preference value.
Max. range	0 to 4294967295
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-list [**seg-list-index**] *number*

Synopsis	Enter the segment-list list instance
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> segment-list <i>number</i>
Tree	segment-list
Description	Commands in this context configure a segment list for the statically defined segment routing policy.
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[seg-list-index] *number*

Synopsis	Index for identifying a specific segment list
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of segment list for static policy

Context **configure** *router* *named-item-64* *segment-routing* *sr-policies* *static-policy* *named-item-64* *segment-list* *number* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

segment [*segment-index*] *number*

Synopsis Enter the **segment** list instance

Context **configure** *router* *named-item-64* *segment-routing* *sr-policies* *static-policy* *named-item-64* *segment-list* *number* **segment** *number*

Tree **segment**

Description Commands in this context configure a segment inside a segment-list of a statically-defined segment routing policy candidate path.

A segment list of a statically-defined SR policy candidate path of type **sr-mpls** can only accept a segment of type **mpls-label**.

A segment list of a statically-defined SR policy candidate path of type **srv6** can only accept a segment of type **srv6-sid**. However, you can mix SRv6 segments derived from both classic SRv6 and micro-segment SRv6 locators.

Max. instances 24

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[segment-index] *number*

Synopsis Index for identifying a segment in a segment list

Context **configure** *router* *named-item-64* *segment-routing* *sr-policies* *static-policy* *named-item-64* *segment-list* *number* **segment** *number*

Tree **segment**

Description	This command configures the index for identifying a segment in a segment list. Each segment list can have up to 11 segments for SR-MPLS policies, and 24 segments for an SRv6 segment list which only includes micro-segments. For an SRv6 segment list that mixes regular and micro-segments, up to 7 regular segments can be configured.
Range	1 to 24
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-label *number*

Synopsis	Value for the MPLS label
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> segment-list <i>number</i> segment <i>number</i> mpls-label <i>number</i>
Tree	mpls-label
Range	0 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Weight of the segment list
Context	configure router <i>named-item-64</i> segment-routing sr-policies static-policy <i>named-item-64</i> segment-list <i>number</i> weight <i>number</i>
Tree	weight
Description	This command associates an optional weight value with a segment list of a statically defined segment routing policy to achieve weighted ECMP behavior. When any segment list in the active policy has a weight greater than 1, traffic matching the policy is load-balanced across the segment lists according to their relative weight values.
Max. range	0 to 4294967295
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sfm-overload

Synopsis Enable the **sfm-overload** context

Context **configure** [router](#) *named-item-64* [sfm-overload](#)

Tree [sfm-overload](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

holdoff-time *number*

Synopsis Delay in detecting SFM failures and setting overload

Context **configure** [router](#) *named-item-64* [sfm-overload](#) [holdoff-time](#) *number*

Tree [holdoff-time](#)

Range 1 to 600

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sgt-qos

Synopsis Enter the **sgt-qos** context

Context **configure** [router](#) *named-item-64* [sgt-qos](#)

Tree [sgt-qos](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dot1p

Synopsis Enter the **dot1p** context

Context **configure** [router](#) *named-item-64* [sgt-qos](#) [dot1p](#)

Tree [dot1p](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

application [[dot1p-app-name](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure router <i>named-item-64</i> sgt-qos dot1p application <i>keyword</i>
Tree	application
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dot1p-app-name] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	configure router <i>named-item-64</i> sgt-qos dot1p application <i>keyword</i>
Tree	application
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p (*keyword | number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	configure router <i>named-item-64</i> sgt-qos dot1p application <i>keyword</i> dot1p (<i>keyword number</i>)
Tree	dot1p
Range	0 to 7
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp

Synopsis	Enter the dscp context
Context	configure router <i>named-item-64</i> sgt-qos dscp
Tree	dscp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

application [[dscp-app-name](#)] keyword

Synopsis	Enter the application list instance
Context	configure router <i>named-item-64</i> sgt-qos dscp application <i>keyword</i>
Tree	application
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[dscp-app-name](#)] keyword

Synopsis	DSCP application identifier on the NOKIA SR OS router that generates control traffic over IP
Context	configure router <i>named-item-64</i> sgt-qos dscp application <i>keyword</i>
Tree	application
Options	bgp, cflowd, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, igmp-reporter, gtp, sflow, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, mpls-udp-return, pfcp, ibcp, bfd
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	configure router <i>named-item-64</i> sgt-qos dscp application <i>keyword</i> dscp (<i>keyword</i> <i>number</i>)
Tree	dscp
Range	0 to 63

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp-map [[dscp-name](#)] *keyword*

Synopsis	Enter the dscp-map list instance
Context	configure router <i>named-item-64</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dscp-name] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	configure router <i>named-item-64</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	configure router <i>named-item-64</i> sgt-qos dscp dscp-map <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured)

	h2 – High 2 (high priority)
	ef – Expedited Forwarding (high priority)
	h1 – High 1 (high priority)
	nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-routes

Synopsis	Enter the static-routes context
Context	configure router <i>named-item-64</i> static-routes
Tree	static-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down

Synopsis	Enable the hold-down context
Context	configure router <i>named-item-64</i> static-routes hold-down
Tree	hold-down
Description	<p>Commands in this context enable the hold-down time feature globally for static routes in the system.</p> <p>The static route hold-down time is a mechanism to protect from rapid, fluctuating state changes of static routes resulting from issues with reachability because of link flap.</p> <p>The commands in this context apply to all static routes in the VPRN and the base router instance in which this hold-down time is configured in.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial number

Synopsis	Value for the initial hold-down time
Context	configure router <i>named-item-64</i> static-routes hold-down initial <i>number</i>
Tree	initial
Description	<p>This command specifies the initial value of the hold-down time globally for static routes in the system.</p> <p>When a static route is ready to become active, it remains inactive for the hold-down time before activating the static-route. If, during this hold-down period, the static route</p>

becomes inactive again because of factors such as interface failure, the hold-down timer is reset, effectively postponing the activation of the route until the next opportunity.

Range 1 to 65535

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-value *number*

Synopsis Maximum value of the hold-down time

Context **configure** *router* *named-item-64* *static-routes* *hold-down* *max-value* *number*

Tree *max-value*

Description This command specifies the maximum value of the hold-down time globally for static routes in the system.

Range 1 to 65535

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

multiplier *number*

Synopsis Multiplier of the previous hold-down time

Context **configure** *router* *named-item-64* *static-routes* *hold-down* *multiplier* *number*

Tree *multiplier*

Description This command specifies the multiplier value by which the previous hold-down time is multiplied to calculate the new one. This value applies globally for static routes in the system.

Range 1 to 10

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *route-type* *keyword*

Synopsis Enter the **route** list instance

Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Description	<p>Commands in this context create a static route entry. A prefix and netmask must be specified.</p> <p>After the static route context for the specified prefix and netmask has been created, additional options associated with the static route or routes may be specified through the inclusion of additional static route commands.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-type *keyword*

Synopsis	Static route type
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole

Synopsis	Enable the blackhole context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole

Tree	blackhole
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole community <i>community</i>
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

dynamic-bgp *boolean*

Synopsis Derive static route next hop from BGP next hop value

Context **configure** **router** *named-item-64* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **blackhole** **dynamic-bgp** *boolean*

Tree **dynamic-bgp**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate-icmp *boolean*

Synopsis Send ICMP unreachable messages when received packets match a static route with black-hole next-hop

Context **configure** **router** *named-item-64* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **blackhole** **generate-icmp** *boolean*

Tree **generate-icmp**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

metric *number*

Synopsis Static route metric

Context **configure** **router** *named-item-64* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **blackhole** **metric** *number*

Tree **metric**

Description This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.

Range 0 to 65535

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list flag <i>keyword</i>
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Prefix list name
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole prefix-list name reference
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole tag number
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword community community
Tree	community
String length	1 to 72
Max. instances	12
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-next-hop [**interface-name**] *interface-name*

Synopsis	Enter the dhcp-next-hop list instance
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword dhcp-next-hop interface-name</i>
Tree	dhcp-next-hop
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword dhcp-next-hop interface-name</i>
Tree	dhcp-next-hop
String length	1 to 32
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword dhcp-next-hop interface-name admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword dhcp-next-hop interface-name community community</i>
Tree	community
Description	This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.

If at least one community is specified at the prefix level of the static route entry, this command is ignored.

String length	1 to 72
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop <i>interface-name</i> description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop <i>interface-name</i> metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop <i>interface-name</i> preference <i>number</i>
Tree	preference

Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

tag number

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop <i>interface-name</i> tag <i>number</i>
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

indirect [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the indirect list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect

Description	This command specifies the next-hop IP address used to reach the destination. The specified IP address can be either on the network side or the access side and is typically at least one hop away from the node.
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community <i>community</i>
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	cpe-check
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255

Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list flag keyword
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name reference

Synopsis	Prefix list name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list name reference
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag number

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tag <i>number</i>
Tree	tag
Description	<p>This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols.</p> <p>If a tag is specified at the prefix level of the static route entry, this command is ignored.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop
Tree	tunnel-next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

disallow-igp boolean

Synopsis	Do not resolve indirect static routes using IGP next-hops in RTM if no tunnel next-hops found in TTM
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop disallow-igp <i>boolean</i>
Tree	disallow-igp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flex-algo number

Synopsis	Flexible Algorithm ID
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution *keyword*

Synopsis	Tunnel next hop resolution to resolve indirect static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution <i>keyword</i>
Tree	resolution
Options	none, filter, any
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp *boolean*

Synopsis	Use LDP Route Forwarding Equivalence Class (FEC) tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter ldp <i>boolean</i>
Tree	ldp

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te

Synopsis	Enable the rsvp-te context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword indirect</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te
Tree	rsvp-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp [*lsp-name*] *named-item-64*

Synopsis	Add a list entry for lsp
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword indirect</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te lsp <i>named-item-64</i>
Tree	lsp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[*lsp-name*] *named-item-64*

Synopsis	Labeled Switch Path name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword indirect</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te lsp <i>named-item-64</i>
Tree	lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis boolean

Synopsis	Use the SR ISIS tunneling mechanism to resolve next hop for the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-isis boolean
Tree	sr-isis
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf boolean

Synopsis	Use SR OSPF tunneling for next-hop resolution
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-ospf boolean
Tree	sr-ospf
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 boolean

Synopsis	Use SR OSPFv3 tunneling mechanism to resolve next-hop
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-ospf3 boolean
Tree	sr-ospf3
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te

Synopsis	Enable the sr-te context
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword indirect</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te
Tree	sr-te
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp [**lsp-name**] *named-item-64*

Synopsis	Add a list entry for lsp
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword indirect</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te lsp <i>named-item-64</i>
Tree	lsp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lsp-name] *named-item-64*

Synopsis	Labeled Switch Path name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword indirect</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te lsp <i>named-item-64</i>
Tree	lsp
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [**interface-name**] *interface-name*

Synopsis	Enter the interface list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword interface</i> <i>interface-name</i>
Tree	interface
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis Router interface name

Context **configure** **router** *named-item-64* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword interface interface-name

Tree **interface**

String length 1 to 32

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the static route operation

Context **configure** **router** *named-item-64* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword interface interface-name admin-state keyword

Tree **admin-state**

Options enable, disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

community *community*

Synopsis Community ID associated with the static route

Context **configure** **router** *named-item-64* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword interface interface-name community community

Tree **community**

Description This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.

If at least one community is specified at the prefix level of the static route entry, this command is ignored.

String length 1 to 72

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cpe-check [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>interface-name</i> prefix-list flag <i>keyword</i>
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Prefix list name
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword interface interface-name prefix-list name reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword interface interface-name tag number</i>
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec-tunnel [**ipsec-tunnel-name**] *named-item*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword ipsec-tunnel named-item</i>
Tree	ipsec-tunnel
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ipsec-tunnel-name] *named-item*

Synopsis	IPsec tunnel name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword ipsec-tunnel named-item</i>
Tree	ipsec-tunnel
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>named-item</i> admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

community *community*

Synopsis	Community ID associated with the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>named-item</i> community <i>community</i>
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>named-item</i> description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

metric number

Synopsis	Static route metric
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>named-item</i> metric number
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

preference number

Synopsis	Priority of static route over different route sources
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>named-item</i> preference number
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tag number

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>named-item</i> tag number
Tree	tag

Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

leak-destination

Synopsis	Enter the leak-destination context
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword leak-destination
Tree	leak-destination
Description	<p>Commands in this context configure a list of VPRNs that receive a leaked copy of the static route. When a VPRN service is added to this list, the static route is leaked into that VPRN if the following conditions are met:</p> <ul style="list-style-type: none"> • all the configured next hops of the static route are direct next hops • the static route is an active route, or it is capable of immediately becoming an active route when a more-preferred route for the same prefix is removed <p>Static routes leaked using this method appear as "VPN Leak" protocol routes in the route table of the VPRN.</p> <p>When a packet received by a VPRN matches a "VPN Leak" route leaked using this method, the packet is forwarded according to the configuration of the static route in the GRT, even if the static route is currently non-best in the GRT.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance [[service-name](#)] *reference*

Synopsis	Add a list entry for router-instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword leak-destination router-instance <i>reference</i>
Tree	router-instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] reference

Synopsis	VPRN service name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> leak-destination router-instance reference
Tree	router-instance
Reference	configure service vpn <i>service-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop [ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the next-hop list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the directly-connected next hop
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Description	This command specifies the IP address of the directly-connected next hop. The IP address can either be on the network side or the access side on the node. The address must be associated with a network directly connected to a network configured on the node.
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) community <i>community</i>
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpe-check [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-sync *boolean*

Synopsis	Use LDP synchronization feature for a static route
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) load-balancing-weight <i>number</i>

Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric number

Synopsis	Static route metric
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference number

Synopsis	Priority of static route over different route sources
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
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Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list flag keyword
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Prefix list name
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list name reference
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tag number
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols.

If a tag is specified at the prefix level of the static route entry, this command is ignored.

Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate-next-hop *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) validate-next-hop <i>boolean</i>
Tree	validate-next-hop
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure router <i>named-item-64</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

triggered-policy *boolean*

Synopsis	Trigger route policy re-evaluation
Context	configure router <i>named-item-64</i> triggered-policy <i>boolean</i>
Tree	triggered-policy
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-propagate

Synopsis	Enter the ttl-propagate context
Context	configure router <i>named-item-64</i> ttl-propagate
Tree	ttl-propagate
Description	Commands in this context configure TTL propagation for transit and locally generated packets in the Global Routing Table (GRT) and VPRN routing contexts.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-route-local *keyword*

Synopsis	TTL propagation from IP header into label stack for local packets
Context	configure router <i>named-item-64</i> ttl-propagate label-route-local <i>keyword</i>
Tree	label-route-local
Options	none – Do not propagate TTL or hop-limit field value all – Propagate TTL or hop-limit field value
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-route-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for transit packets
Context	configure router <i>named-item-64</i> ttl-propagate label-route-transit <i>keyword</i>
Tree	label-route-transit
Options	none – Do not propagate TTL or hop-limit field value all – Propagate TTL or hop-limit field value
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsr-label-route *keyword*

Synopsis	TTL propagation from IP header into label stack
Context	configure router <i>named-item-64</i> ttl-propagate lsr-label-route <i>keyword</i>

Tree	lsr-label-route
Options	none – Do not propagate TTL or hop-limit field value all – Propagate TTL or hop-limit field value
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-mpls-local *keyword*

Synopsis	TTL propagation for local CPM generated IP packets
Context	configure router <i>named-item-64</i> ttl-propagate sr-mpls-local <i>keyword</i>
Tree	sr-mpls-local
Description	<p>This command configures TTL or hop-limit propagation for all segment routing MPLS tunnels carrying IPv4 or IPv6 packets. This applies to IPv4 and IPv6 packets of IGP, BGP unlabelled (except 6PE), and static routes in the base router whose next hop is resolved to a Segment Routing MPLS (SR-MPLS) tunnel of any of the following types: SR-ISIS, SR-OSPF, SR-OSPF3, SR-TE LSP, and SR policy.</p> <p>This command enables or disables propagation of the TTL or hop-limit field value of CPM originated IP packet to all labels in the segment routing transport label stack. Use the sr-mpls-transit command to configure TTL or hop-limit propagation for transit IP packets.</p>
Options	none – Do not propagate TTL or hop-limit field value all – Propagate TTL or hop-limit field value
Default	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-mpls-transit *keyword*

Synopsis	TTL propagation for in-transit user IP packets
Context	configure router <i>named-item-64</i> ttl-propagate sr-mpls-transit <i>keyword</i>
Tree	sr-mpls-transit
Description	<p>This command configures TTL or hop-limit propagation for all segment routing MPLS tunnels carrying IPv4 or IPv6 packets. This applies to IPv4 and IPv6 packets of IGP, BGP unlabelled (except 6PE), and static routes in the base router whose next hop is resolved to a Segment Routing MPLS (SR-MPLS) tunnel of any of the following types: SR-ISIS, SR-OSPF, SR-OSPF3, SR-TE LSP, and SR policy.</p> <p>This command enables or disables propagation of the TTL or hop-limit field value for transit IP packets to all labels in the segment routing transport label stack. Transit IP packets are packets of base router prefixes received on an access interface or a</p>

network interface (with or without tunnel encapsulation) and whose FIB lookup results in forwarding them over an SR-MPLS tunnel. Use the **sr-mpls-local** command to configure TTL or hop-limit propagation for CPM originated IP packets.

Options	none – Do not propagate TTL or hop-limit field value all – Propagate TTL or hop-limit field value
Default	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn-local keyword

Synopsis	TTL propagation from IP header into label stack for VPRN local packets
Context	configure router <i>named-item-64</i> ttl-propagate vprn-local keyword
Tree	vprn-local
Options	none, all, vc-only
Default	vc-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn-transit keyword

Synopsis	TTL propagation from IP header into label stack for VPRN transit packets
Context	configure router <i>named-item-64</i> ttl-propagate vprn-transit keyword
Tree	vprn-transit
Options	none, all, vc-only
Default	vc-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-interface

Synopsis	Enter the tunnel-interface context
Context	configure router <i>named-item-64</i> tunnel-interface
Tree	tunnel-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-p2mp-leaf [**p2mp-id**] *number* **sender-address** *ipv4-unicast-address*

Synopsis	Enter the ldp-p2mp-leaf list instance
Context	configure router <i>named-item-64</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>ipv4-unicast-address</i>
Tree	ldp-p2mp-leaf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[p2mp-id] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	configure router <i>named-item-64</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>ipv4-unicast-address</i>
Tree	ldp-p2mp-leaf
Max. range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sender-address *ipv4-unicast-address*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	configure router <i>named-item-64</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>ipv4-unicast-address</i>
Tree	ldp-p2mp-leaf
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure <i>router</i> <i>named-item-64</i> <i>tunnel-interface</i> <i>ldp-p2mp-leaf</i> <i>number</i> <i>sender-address</i> <i>ipv4-unicast-address</i> <i>description</i> <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp-p2mp-root [*p2mp-id*] *number* *sender-address* *ipv4-unicast-address*

Synopsis	Enter the ldp-p2mp-root list instance
Context	configure <i>router</i> <i>named-item-64</i> <i>tunnel-interface</i> <i>ldp-p2mp-root</i> <i>number</i> <i>sender-address</i> <i>ipv4-unicast-address</i>
Tree	<i>ldp-p2mp-root</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[p2mp-id] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	configure <i>router</i> <i>named-item-64</i> <i>tunnel-interface</i> <i>ldp-p2mp-root</i> <i>number</i> <i>sender-address</i> <i>ipv4-unicast-address</i>
Tree	<i>ldp-p2mp-root</i>
Range	1 to 8192
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sender-address *ipv4-unicast-address*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	configure <i>router</i> <i>named-item-64</i> <i>tunnel-interface</i> <i>ldp-p2mp-root</i> <i>number</i> <i>sender-address</i> <i>ipv4-unicast-address</i>
Tree	<i>ldp-p2mp-root</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address ipv4-unicast-address description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

twamp-light

Synopsis	Enter the twamp-light context
Context	configure router <i>named-item-64</i> twamp-light
Tree	twamp-light
Description	Commands in this context configure TWAMP Light parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reflector

Synopsis	Enable the reflector context
Context	configure router <i>named-item-64</i> twamp-light reflector
Tree	reflector
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the TWAMP Light reflector
----------	---

Context	configure router <i>named-item-64</i> twamp-light reflector admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ipv6-udp-checksum-zero *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure router <i>named-item-64</i> twamp-light reflector allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, the router processes IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.</p> <p>When configured to false, the router discards IPv6 packets that arrive with a UDP checksum of zero.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> twamp-light reflector description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>named-item-64</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Description	Commands in this context configure which TWAMP Light packet prefixes the reflector processes.
Max. instances	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	configure router <i>named-item-64</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure router <i>named-item-64</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Processing behavior type for the reflector
Context	configure router <i>named-item-64</i> twamp-light reflector type <i>keyword</i>

Tree	type
Description	<p>This command configures the processing behavior of the TWAMP Light reflector.</p> <p>When the value is twamp-light the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is stamp, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to stamp. When the reflector is operating in stamp mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Options	stamp – Reflector finds and processes supported STAMP TLVs twamp-light – Reflector does not check received PDU
Default	twamp-light
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udp-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	configure router <i>named-item-64</i> twamp-light reflector udp-port <i>number</i>
Tree	udp-port
Range	862 64364 to 64373
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *keyword*

Synopsis	Weighted load-balancing capability for ECMP routes
Context	configure router <i>named-item-64</i> weighted-ecmp <i>keyword</i>
Tree	weighted-ecmp
Options	false, true, strict

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.25 routing-options commands

```

configure
- routing-options
- admin-tags
  - admin-tag string
  - route-admin-tag-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - exclude reference
    - include reference
- apply-groups reference
- apply-groups-exclude reference
- flexible-algorithm-definitions
  - apply-groups reference
  - apply-groups-exclude reference
  - flex-algo named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - exclude
      - admin-group reference
    - flags-tlv boolean
    - include-all
      - admin-group reference
    - include-any
      - admin-group reference
    - metric-type keyword
    - priority number
- if-attribute
  - admin-group named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - value number
  - apply-groups reference
  - apply-groups-exclude reference
  - srlg-group named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - penalty-weight number
    - value number
- route-next-hop-policy
  - apply-groups reference
  - apply-groups-exclude reference
  - template named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - exclude-group reference
    - include-group reference
      - apply-groups reference
      - apply-groups-exclude reference
    - preference number
  - nh-type keyword
  - protection-type keyword
  - srlg boolean

```

4.25.1 routing-options command descriptions

routing-options

Synopsis	Enter the routing-options context
Context	configure routing-options
Tree	routing-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-tags

Synopsis	Enter the admin-tags context
Context	configure routing-options admin-tags
Tree	admin-tags
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-tag [[tag](#)] *string*

Synopsis	Add a list entry for admin-tag
Context	configure routing-options admin-tags admin-tag <i>string</i>
Tree	admin-tag
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[tag](#)] *string*

Synopsis	Administrative tag value
Context	configure routing-options admin-tags admin-tag <i>string</i>
Tree	admin-tag
String length	1 to 32
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

route-admin-tag-policy [[policy-name](#)] *string*

Synopsis Enter the **route-admin-tag-policy** list instance
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*
Tree [route-admin-tag-policy](#)
Max. instances 2048
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[policy-name] *string*

Synopsis Name of the route admin tag policy
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*
Tree [route-admin-tag-policy](#)
String length 1 to 64
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

exclude [[tag](#)] *reference*

Synopsis Add a list entry for **exclude**
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string* **exclude** *reference*
Tree [exclude](#)
Max. instances 8
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[tag] *reference*

Synopsis Administrative tag value

Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> exclude <i>reference</i>
Tree	exclude
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include [[tag](#)] *reference*

Synopsis	Add a list entry for include
Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> include <i>reference</i>
Tree	include
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[tag] *reference*

Synopsis	Administrative tag value
Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> include <i>reference</i>
Tree	include
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flexible-algorithm-definitions

Synopsis	Enter the flexible-algorithm-definitions context
Context	configure routing-options flexible-algorithm-definitions
Tree	flexible-algorithm-definitions
Description	Commands in this context enable locally-configured algorithm definitions and configure administrative groups.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

flex-algo [[flex-algo-name](#)] *named-item*

Synopsis	Enter the flex-algo list instance
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i>
Tree	flex-algo
Description	Commands in this context configure the definition context for a Flexible Algorithm Definition (FAD).
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[flex-algo-name] *named-item*

Synopsis	Flexible Algorithm Definition (FAD) name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i>
Tree	flex-algo
Description	This command specifies the name of the flexible algorithm definition that is used as a reference anchor for the configuration.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the FAD
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *named-item* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

exclude



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **exclude** context

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *named-item* [exclude](#)

Tree [exclude](#)

Description Commands in this context define administrative groups that are used to exclude links from the Flexible Algorithm topology graph.

Administrative groups, also known as link colors, are attributes associated with a link. The exclude rule that is part of the FAD specifies that links with the named administrative groups set are to be excluded from the topology graph.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-group [[group-name](#)] *reference*

Synopsis Add a list entry for **admin-group**

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *named-item* [exclude](#) [admin-group](#) *reference*

Tree [admin-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> exclude admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flags-tlv *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise the FAD Flags TLV
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> flags-tlv <i>boolean</i>
Tree	flags-tlv
Description	<p>When configured to true, the router advertises the FAD Flags TLV within the FAD. The M-flag within the TLV is set to 1, specifying the use of a Flex-Algorithm specific prefix metric. A router receiving the TLV modifies the constrained SPF (cSPF) based on the M-flag status.</p> <p>When configured to false, the FAD Flags TLV is not included with the FAD advertisement.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-all



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the include-all context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> include-all
Tree	include-all
Description	<p>Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that all named administrative groups must be present in a link to be included in the topology graph.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group [\[group-name\]](#) *reference*

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> include-all admin-group <i>reference</i>
Tree	admin-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[group-name\]](#) *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> include-all admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-any



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the include-any context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> include-any
Tree	include-any
Description	<p>Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that any link with the named administrative groups is included in the topology graph.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group [[group-name](#)] *reference*

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> include-any admin-group <i>reference</i>
Tree	admin-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[group-name](#)] *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> include-any admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-type *keyword*

 **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD metric type
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> metric-type <i>keyword</i>
Tree	metric-type
Options	igp, delay, te-metric
Default	igp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

 **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD priority
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>named-item</i> priority <i>number</i>
Tree	priority
Description	This command configures the priority of the FAD. The priority is used as a tie-breaker when the router has received multiple FADs for the same flexible algorithm.
Range	0 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

if-attribute

Synopsis	Enter the if-attribute context
Context	configure routing-options if-attribute
Tree	if-attribute

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group *[group-name] named-item*

Synopsis	Enter the admin-group list instance
Context	configure routing-options if-attribute admin-group <i>named-item</i>
Tree	admin-group
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item*

Synopsis	Interface group name
Context	configure routing-options if-attribute admin-group <i>named-item</i>
Tree	admin-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the group
Context	configure routing-options if-attribute admin-group <i>named-item</i> value <i>number</i>
Tree	value
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

srlg-group [*name*] *named-item*

Synopsis Enter the **srlg-group** list instance

Context **configure** [routing-options](#) [if-attribute srlg-group](#) *named-item*

Tree [srlg-group](#)

Max. instances 1024

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis SRLG name

Context **configure** [routing-options](#) [if-attribute srlg-group](#) *named-item*

Tree [srlg-group](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

penalty-weight *number*

Synopsis Integer value of the penalty weight assigned to SRLG

Context **configure** [routing-options](#) [if-attribute srlg-group](#) *named-item* [penalty-weight](#) *number*

Tree [penalty-weight](#)

Description This command specifies the penalty weight associated with a SRLG. The higher the penalty weight, the less desirable it is to use the link with a given SRLG.

Range 0 to 65535

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

value *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the SRLG
Context	configure routing-options if-attribute srlg-group <i>named-item</i> value <i>number</i>
Tree	value
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-next-hop-policy

Synopsis	Enter the route-next-hop-policy context
Context	configure routing-options route-next-hop-policy
Tree	route-next-hop-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

template [[template-name](#)] *named-item*

Synopsis	Enter the template list instance
Context	configure routing-options route-next-hop-policy template <i>named-item</i>
Tree	template
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[template-name] *named-item*

Synopsis	Template name
Context	configure routing-options route-next-hop-policy template <i>named-item</i>
Tree	template
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure routing-options route-next-hop-policy template <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-group [[group-name](#)] *reference*

Synopsis	Add a list entry for exclude-group
Context	configure routing-options route-next-hop-policy template <i>named-item</i> exclude-group <i>reference</i>
Tree	exclude-group
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options route-next-hop-policy template <i>named-item</i> exclude-group <i>reference</i>
Tree	exclude-group
Description	<p>This command specifies the name of the administrative group.</p> <p>If the same group name is part of both include and exclude statements, the exclude statement wins. In other words, the exclude statement can be viewed as having an implicit preference value of 0.</p>

Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-group [\[group-name\]](#) *reference*

Synopsis	Enter the include-group list instance
Context	configure routing-options route-next-hop-policy template <i>named-item</i> include-group reference
Tree	include-group
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options route-next-hop-policy template <i>named-item</i> include-group reference
Tree	include-group
Description	<p>This command specifies the name of the administrative group.</p> <p>If the same group name is part of both include and exclude statements, the exclude statement wins. In other words, the exclude statement can be viewed as having an implicit preference value of 0.</p>
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Preference number for the admin group
Context	configure routing-options route-next-hop-policy template <i>named-item</i> include-group reference preference <i>number</i>

Tree	preference
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nh-type *keyword*

Synopsis	Preferred next hop
Context	configure routing-options route-next-hop-policy template <i>named-item</i> nh-type <i>keyword</i>
Tree	nh-type
Options	ip, tunnel
Default	ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protection-type *keyword*

Synopsis	Protection type used
Context	configure routing-options route-next-hop-policy template <i>named-item</i> protection-type <i>keyword</i>
Tree	protection-type
Options	link, node
Default	node
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg *boolean*

Synopsis	Select next hops from the SRLG
Context	configure routing-options route-next-hop-policy template <i>named-item</i> srlg <i>boolean</i>
Tree	srlg
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.26 saa commands

```

configure
-  saa
  -  apply-groups reference
  -  apply-groups-exclude reference
  -  owner named-item test named-item
  -  accounting-policy reference
  -  admin-state keyword
  -  apply-groups reference
  -  apply-groups-exclude reference
  -  continuous boolean
  -  description description
  -  jitter-event keyword threshold-type keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  threshold number
  -  latency-event keyword threshold-type keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  threshold number
  -  loss-event keyword threshold-type keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  threshold number
  -  probe-history keyword
  -  type
    -  eth-cfm-loopback
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  count number
      -  destination (mac-unicast-address-no-zero | number)
      -  interval number
      -  ma-admin-name (named-item-64 | admin-name)
      -  md-admin-name (named-item-64 | admin-name)
      -  mep number
      -  qos
        -  fc keyword
        -  profile keyword
      -  size number
      -  timeout number
      -  trap-generation
        -  probe-fail boolean
        -  probe-fail-threshold number
        -  test-complete boolean
        -  test-fail boolean
        -  test-fail-threshold number
    -  icmp-ping
      -  apply-groups reference
      -  apply-groups-exclude reference
      -  bypass-routing boolean
      -  count number
      -  destination-address (ipv4-address-no-zone | ipv6-address-no-zone | string-
not-all-spaces)
        -  do-not-fragment boolean
        -  interface interface-name
        -  interval (number | decimal-number)
        -  next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
        -  pattern (keyword | number)
      -  qos
        -  fc keyword

```

configure saa owner type icmp-ping qos tos

```

- tos number
- router-instance string
- size number
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
- lsp-ping
  - apply-groups reference
  - apply-groups-exclude reference
  - interval number
  - qos
    - fc keyword
    - profile keyword
  - send-count number
  - size number
  - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sub-type
    - bgp-label
      - path-destination
        - interface interface-name
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix (ipv4-prefix | ipv6-prefix)
    - ldp
      - path-destination
        - interface interface-name
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix (ipv4-prefix | ipv6-prefix)
    - rsvp-te
      - lsp-name named-item-64
      - path named-item-64
    - sr-isis
      - igp-instance number
      - path-destination
        - interface interface-name
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf
      - igp-instance number
      - path-destination
        - interface interface-name
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix (ipv4-prefix | ipv6-prefix)
    - sr-policy
      - color number
      - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
      - path-destination
        - interface interface-name
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - segment-list number
    - sr-te
      - lsp-name named-item-64
      - path named-item-64
      - path-destination

```

configure saa owner type lsp-ping sub-type sr-te path-destination interface

```

    - interface interface-name
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
- sdp-ping
  - apply-groups reference
  - apply-groups-exclude reference
  - count number
  - interval number
  - originating-sdp-identifier number
  - qos
    - fc keyword
    - profile keyword
  - responder-sdp-identifier number
  - size number
  - timeout number
  - trap-generation
    - probe-fail boolean
    - probe-fail-threshold number
    - test-complete boolean
    - test-fail boolean
    - test-fail-threshold number

```

4.26.1 saa command descriptions

saa	
Synopsis	Enter the saa context
Context	configure saa
Tree	saa
Description	Commands in this context configure the Service Assurance Agent (SAA) tests.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner [owner-name] <i>named-item</i> test <i>named-item</i>	
Synopsis	Enter the owner list instance
Context	configure saa owner <i>named-item</i> test <i>named-item</i>
Tree	owner
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[owner-name] <i>named-item</i>	
Synopsis	Optional owner name of the SAA operation
Context	configure saa owner <i>named-item</i> test <i>named-item</i>
Tree	owner
Description	This command configures the owner associated with the SAA operation.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	TiMOS CLI
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test *named-item*

Synopsis	SAA test name
Context	configure <i>saa owner named-item test named-item</i>
Tree	<i>owner</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy associated with the SAA test
Context	configure <i>saa owner named-item test named-item accounting-policy reference</i>
Tree	<i>accounting-policy</i>
Reference	configure <i>log accounting-policy number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SAA test
Context	configure <i>saa owner named-item test named-item admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

continuous *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Execute the SAA tests as continuous
Context	configure <i>saa owner named-item test named-item continuous boolean</i>
Tree	<i>continuous</i>
Description	<p>When configured to true, the SAA test execution is continuous, that is, it cannot be started or stopped with the oam saa test start or stop commands.</p> <p>The SAA test types supported by this command include the following:</p> <ul style="list-style-type: none">• cpe-ping• dns• eth-cfm-loopback• eth-cfm-two-way-delay• eth-cfm-two-way-slm• icmp-ping (not applicable to rapid type)• lsp-ping• mac-ping• sdp-ping• vccv-ping• vprn-ping
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>saa owner named-item test named-item description description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

jitter-event [*direction*] *keyword* *threshold-type* *keyword*

Synopsis	Enter the jitter-event list instance
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>jitter-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>jitter-event</i>
Description	Commands in this context configure the jitter event thresholds used to evaluate the jitter event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>jitter-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>jitter-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>jitter-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>jitter-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold jitter value
Context	configure <i>saa owner named-item test named-item jitter-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold jitter value. The system generates an SAA threshold event when the jitter value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

latency-event [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the latency-event list instance
Context	configure <i>saa owner named-item test named-item latency-event keyword threshold-type keyword</i>
Tree	<i>latency-event</i>
Description	Commands in this context configure the latency event thresholds used to evaluate the latency event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner named-item test named-item latency-event keyword threshold-type keyword</i>
Tree	<i>latency-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner named-item test named-item latency-event keyword threshold-type keyword</i>
Tree	<i>latency-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold latency value
Context	configure <i>saa owner named-item test named-item latency-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold latency value. The system generates an SAA threshold event when the latency value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loss-event [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the loss-event list instance
Context	configure <i>saa owner named-item test named-item loss-event keyword threshold-type keyword</i>
Tree	<i>loss-event</i>
Description	Commands in this context configure the loss event thresholds used to evaluate the loss event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[direction] keyword

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner named-item test named-item loss-event keyword threshold-type keyword</i>
Tree	<i>loss-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold-type keyword

Synopsis	Threshold type
Context	configure <i>saa owner named-item test named-item loss-event keyword threshold-type keyword</i>
Tree	<i>loss-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold number

Synopsis	Threshold loss event value
Context	configure <i>saa owner named-item test named-item loss-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold loss value. The system generates an SAA threshold event when the loss value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	packets
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-history keyword



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	History probe behavior
Context	configure saa owner <i>named-item</i> test <i>named-item</i> probe-history keyword
Tree	probe-history
Options	keep, drop, auto
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type

Synopsis	Enter the type context
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type
Tree	type
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm-loopback

Synopsis	Enable the eth-cfm-loopback context
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type eth-cfm-loopback
Tree	eth-cfm-loopback
Description	Commands in this context configure an Ethernet CFM loopback test in SAA.
Notes	The following elements are part of a choice: dns , eth-cfm-loopback , icmp-ping , lsp-ping , sdp-ping , or vccv-ping .
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

count number

Synopsis	Number of packets to send
----------	---------------------------

Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> count <i>number</i>
Tree	count
Range	1 to 100
Units	packets
Default	1
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

destination (*mac-unicast-address-no-zero* | *number*)

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> destination (<i>mac-unicast-address-no-zero</i> <i>number</i>)
Tree	destination
Description	This command specifies the Layer 2 unicast MAC address of the destination MEP or, alternatively, the remote MEP ID. When the remote MEP ID option is used instead of the MAC address, the domain and association information of the source MEP for the test is used to check for a locally stored unicast MAC address for the peer. The local MEP must be administratively enabled.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Interval between packets sent
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> interval <i>number</i>
Tree	interval
Range	1 to 10
Units	seconds
Default	5
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ma-admin-name (*named-item-64* | *admin-name*)

Synopsis	Source Ethernet Maintenance Association (MA) name
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> ma-admin-name (<i>named-item-64</i> <i>admin-name</i>)
Tree	<i>ma-admin-name</i>
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

md-admin-name (*named-item-64* | *admin-name*)

Synopsis	Source Ethernet Maintenance Domain (MD) name
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> md-admin-name (<i>named-item-64</i> <i>admin-name</i>)
Tree	<i>md-admin-name</i>
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

mep *number*

Synopsis	Source Ethernet MEP ID
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> mep <i>number</i>
Tree	<i>mep</i>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type eth-cfm-loopback qos
Tree	qos
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	FC for the sent echo request packets
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type eth-cfm-loopback qos fc keyword
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	nc
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

profile keyword

Synopsis	QoS profile for the sent echo request packets
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type eth-cfm-loopback qos profile keyword
Tree	profile
Options	in – In profile out – Out of profile
Default	in
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

size number

Synopsis	Size of the value field in the sent frames
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> size <i>number</i>
Tree	<i>size</i>
Range	0 to 1500
Units	bytes
Default	0
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Maximum time to wait for a reply packet
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> timeout <i>number</i>
Tree	<i>timeout</i>
Description	This command configures the maximum time the router waits for a reply packet after sending the last probe for the test. When the timeout expires, the test is marked complete and no more packets are processed.
Range	1 to 10
Units	seconds
Default	5
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type eth-cfm-loopback</i> trap-generation
Tree	<i>trap-generation</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner named-item test named-item type eth-cfm-loopback trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	<p>When configured to true, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner named-item test named-item type eth-cfm-loopback trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	<p>This command configures the number of consecutive ping probe failures required to generate a trap.</p> <p>This command has no effect if the probe-fail command is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	configure <i>saa owner named-item test named-item type eth-cfm-loopback trap-generation test-complete boolean</i>
Tree	<i>test-complete</i>
Default	false
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

test-fail *boolean*

Synopsis Enable the generation of test fail notifications

Context **configure** *saa owner named-item test named-item type eth-cfm-loopback trap-generation test-fail boolean*

Tree *test-fail*

Description When configured to **true**, the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the **test-fail-threshold** setting.

Default false

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

test-fail-threshold *number*

Synopsis Total probe failures for trap generation

Context **configure** *saa owner named-item test named-item type eth-cfm-loopback trap-generation test-fail-threshold number*

Tree *test-fail-threshold*

Description This command configures the number of consecutive test failures required to generate a trap.
This command has no effect when **test-fail** is set to **false**.
This command is not applicable to SAA traceroute tests.

Range 0 to 15

Default 1

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

icmp-ping

Synopsis Enable the **icmp-ping** context

Context **configure** *saa owner named-item test named-item type icmp-ping*

Tree *icmp-ping*

Description Commands in this context configure an ICMP ping test.

Notes	The following elements are part of a choice: dns , eth-cfm-loopback , icmp-ping , lsp-ping , sdp-ping , or vccv-ping .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bypass-routing *boolean*

Synopsis	Bypass routing table for directly connected interfaces
Context	configure <i>saa owner named-item test named-item type icmp-ping bypass-routing boolean</i>
Tree	<i>bypass-routing</i>
Default	false
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count *number*

Synopsis	ICMP Echo Request packets to send in a sample window
Context	configure <i>saa owner named-item test named-item type icmp-ping count number</i>
Tree	<i>count</i>
Range	1 to 100000
Units	packets
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-address (*ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces*)

Synopsis	Destination IP address or DNS name to send ping request
Context	configure <i>saa owner named-item test named-item type icmp-ping destination-address (ipv4-address-no-zone ipv6-address-no-zone string-not-all-spaces)</i>
Tree	<i>destination-address</i>
String length	1 to 128

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

do-not-fragment *boolean*

Synopsis	Do not fragment echo request packets (valid for IPv4)
Context	configure <i>saa owner named-item test named-item type icmp-ping do-not-fragment boolean</i>
Tree	<i>do-not-fragment</i>
Description	This command sets the Do Not Fragment (DF) bit in the IPv4 header. This prevents packet fragmentation along the path when there is an MTU mismatch.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Interface name
Context	configure <i>saa owner named-item test named-item type icmp-ping interface interface-name</i>
Tree	<i>interface</i>
String length	1 to 32
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval (*number* | *decimal-number*)

Synopsis	Minimum time to expire before message request is sent
Context	configure <i>saa owner named-item test named-item type icmp-ping interval (number decimal-number)</i>
Tree	<i>interval</i>
Range	1 to 10000

Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address to reach destination
Context	configure <i>saa owner named-item test named-item type icmp-ping next-hop-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>next-hop-address</i>
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern (*keyword* | *number*)

Synopsis	Pattern to fill the data portion in a ping packet
Context	configure <i>saa owner named-item test named-item type icmp-ping pattern (keyword number)</i>
Tree	<i>pattern</i>
Range	0 to 65535
Options	sequential
Default	sequential
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure <i>saa owner named-item test named-item type icmp-ping qos</i>
Tree	<i>qos</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc keyword

Synopsis	Forwarding class
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping qos fc keyword</i>
Tree	<i>fc</i>
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Default	nc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tos number

Synopsis	Type of service
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping qos tos number</i>
Tree	<i>tos</i>
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance string

Synopsis	Router name or VPRN service name
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping router-instance string</i>
Tree	<i>router-instance</i>
Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size number

Synopsis	Packet padding size
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping</i> size <i>number</i>
Tree	<i>size</i>
Description	This command configures the number of bytes in the combined ICMP Header (8 bytes) and ICMP Payload (variable size) of the ICMP Echo Request packets.
Range	0 to 16384
Units	bytes
Default	56
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping</i> source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>source-address</i>
Description	This command configures the source IP address to be loaded into the IP header of the ICMP Echo Request packet. If unconfigured, the router uses a system-selected local address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Time router waits for a reply after sending last probe
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping</i> timeout <i>number</i>
Tree	<i>timeout</i>
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping</i> trap-generation
Tree	<i>trap-generation</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping</i> trap-generation probe-fail <i>boolean</i>
Tree	<i>probe-fail</i>
Description	<p>When configured to true, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type icmp-ping</i> trap-generation probe-fail-threshold <i>number</i>
Tree	<i>probe-fail-threshold</i>
Description	<p>This command configures the number of consecutive ping probe failures required to generate a trap.</p> <p>This command has no effect if the probe-fail command is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	configure <i>saa owner named-item test named-item type icmp-ping trap-generation test-complete boolean</i>
Tree	<i>test-complete</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner named-item test named-item type icmp-ping trap-generation test-fail boolean</i>
Tree	<i>test-fail</i>
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner named-item test named-item type icmp-ping trap-generation test-fail-threshold number</i>
Tree	<i>test-fail-threshold</i>
Description	<p>This command configures the number of consecutive test failures required to generate a trap.</p> <p>This command has no effect when test-fail is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ttl number

Synopsis Time to live in the IP header

Context **configure** *saa owner named-item test named-item type icmp-ping ttl number*

Tree *ttl*

Range 1 to 128

Default 64

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lsp-ping

Synopsis Enable the **lsp-ping** context

Context **configure** *saa owner named-item test named-item type lsp-ping*

Tree *lsp-ping*

Description Commands in this context configure the command options to perform in-band LSP connectivity tests.

LSP ping uses the protocol and data structures defined in RFC 8029, *Detecting Multiprotocol Label Switched (MPLS) Data-Plane Failures*.

Notes The following elements are part of a choice: **dns**, **eth-cfm-loopback**, **icmp-ping**, **lsp-ping**, **sd-ping**, or **vccv-ping**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval number

Synopsis Minimum time before the next lsp-ping request is sent

Context **configure** *saa owner named-item test named-item type lsp-ping interval number*

Tree *interval*

Range 1 to 10

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

qos

Synopsis Enter the **qos** context

Context **configure** *saa owner* *named-item* *test* *named-item* *type* *lsp-ping* **qos**

Tree **qos**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc keyword

Synopsis Forwarding class

Context **configure** *saa owner* *named-item* *test* *named-item* *type* *lsp-ping* **qos** **fc** *keyword*

Tree **fc**

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Default be

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile keyword

Synopsis Profile

Context **configure** *saa owner* *named-item* *test* *named-item* *type* *lsp-ping* **qos** **profile** *keyword*

Tree **profile**

Options
 in – In profile
 out – Out of profile

Default out

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

send-count *number*

Synopsis	Number of request packets to send in a sample window
Context	configure <i>saa owner named-item test named-item type lsp-ping send-count number</i>
Tree	<i>send-count</i>
Range	1 to 100
Units	packets
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Packet pad size
Context	configure <i>saa owner named-item test named-item type lsp-ping size number</i>
Tree	<i>size</i>
Range	1 to 9786
Units	bytes
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address
Context	configure <i>saa owner named-item test named-item type lsp-ping source-ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>source-ip-address</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sub-type

Synopsis	Enter the sub-type context
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type</i>

Tree	sub-type
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-label

Synopsis	Enable the bgp-label context
Context	configure saa owner named-item test named-item type lsp-ping sub-type bgp-label
Tree	bgp-label
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner named-item test named-item type lsp-ping sub-type bgp-label path-destination
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner named-item test named-item type lsp-ping sub-type bgp-label path-destination interface interface-name
Tree	interface
String length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type</i> <i>lsp-ping</i> <i>sub-type</i> <i>bgp-label</i> <i>path-destination</i> ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>ip-address</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type</i> <i>lsp-ping</i> <i>sub-type</i> <i>bgp-label</i> <i>path-destination</i> next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>next-hop</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type</i> <i>lsp-ping</i> <i>sub-type</i> <i>bgp-label</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	<i>prefix</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp

Synopsis	Enable the ldp context
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type</i> <i>lsp-ping</i> <i>sub-type</i> ldp
Tree	<i>ldp</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner named-item test named-item type lsp-ping sub-type ldp path-destination
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner named-item test named-item type lsp-ping sub-type ldp path-destination interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner named-item test named-item type lsp-ping sub-type ldp path-destination ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
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Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type ldp path-destination next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type ldp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp-te

Synopsis	Enable the rsvp-te context
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type rsvp-te
Tree	rsvp-te
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *named-item-64*

Synopsis	Name of the LSP to be tested
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type rsvp-te lsp-name <i>named-item-64</i>
Tree	lsp-name
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

path *named-item-64*

Synopsis Name of the MPLS path to be tested
Context **configure** *saa owner named-item test named-item type lsp-ping sub-type rsvp-te path named-item-64*
Tree *path*
String length 1 to 64
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sr-isis

Synopsis Enable the **sr-isis** context
Context **configure** *saa owner named-item test named-item type lsp-ping sub-type sr-isis*
Tree *sr-isis*
Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

igp-instance *number*

Synopsis IGP instance for the SR IS-IS test
Context **configure** *saa owner named-item test named-item type lsp-ping sub-type sr-isis igp-instance number*
Tree *igp-instance*
Range 0 to 127
Default 0
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-isis path-destination
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-isis path-destination interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-isis path-destination ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-isis path-destination next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-isis prefix (ipv4-prefix ipv6-prefix)</i>
Tree	<i>prefix</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf

Synopsis	Enable the sr-ospf context
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-ospf</i>
Tree	<i>sr-ospf</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-instance *number*

Synopsis	IGP instance for the SR OSPF test
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-ospf igp-instance number</i>
Tree	<i>igp-instance</i>
Range	0 to 31
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-ospf path-destination
Tree	path-destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-ospf path-destination interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-ospf path-destination ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-ospf path-destination next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure saa owner named-item test named-item type lsp-ping sub-type sr-ospf prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy

Synopsis	Enable the sr-policy context
Context	configure saa owner named-item test named-item type lsp-ping sub-type sr-policy
Tree	sr-policy
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

color *number*

Synopsis	Segment Routing color for the test
Context	configure saa owner named-item test named-item type lsp-ping sub-type sr-policy color <i>number</i>
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Segment Routing endpoint for the test
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type lsp-ping sub-type sr-policy endpoint</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>endpoint</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type lsp-ping sub-type sr-policy path-destination</i>
Tree	<i>path-destination</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type lsp-ping sub-type sr-policy path-destination interface</i> <i>interface-name</i>
Tree	<i>interface</i>
String length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure <i>saa owner</i> <i>named-item</i> test <i>named-item</i> <i>type lsp-ping sub-type sr-policy path-destination ip-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>ip-address</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-policy path-destination next-hop</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>next-hop</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-policy segment-list number</i>
Tree	<i>segment-list</i>
Range	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te

Synopsis	Enable the sr-te context
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-te</i>
Tree	<i>sr-te</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-name *named-item-64*

Synopsis	Name of the LSP to be tested
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Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-te lsp-name named-item-64</i>
Tree	<i>lsp-name</i>
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path *named-item-64*

Synopsis	Name of the MPLS path to be tested
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-te path named-item-64</i>
Tree	<i>path</i>
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-te path-destination</i>
Tree	<i>path-destination</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *interface-name*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner named-item test named-item type lsp-ping sub-type sr-te path-destination interface interface-name</i>
Tree	<i>interface</i>
String length	1 to 32

Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-te path-destination ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping sub-type sr-te path-destination next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time router waits for a reply to an echo request
Context	configure saa owner <i>named-item</i> test <i>named-item</i> type lsp-ping timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner named-item test named-item type lsp-ping trap-generation</i>
Tree	<i>trap-generation</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner named-item test named-item type lsp-ping trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	<p>When configured to true, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner named-item test named-item type lsp-ping trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	<p>This command configures the number of consecutive ping probe failures required to generate a trap.</p> <p>This command has no effect if the probe-fail command is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	configure <i>saa owner named-item test named-item type lsp-ping trap-generation test-complete boolean</i>
Tree	<i>test-complete</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner named-item test named-item type lsp-ping trap-generation test-fail boolean</i>
Tree	<i>test-fail</i>
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner named-item test named-item type lsp-ping trap-generation test-fail-threshold number</i>
Tree	<i>test-fail-threshold</i>
Description	<p>This command configures the number of consecutive test failures required to generate a trap.</p> <p>This command has no effect when test-fail is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ttl *number*

Synopsis TTL value for the echo request MPLS label

Context **configure** *saa owner named-item test named-item type lsp-ping ttl number*

Tree *tll*

Range 1 to 255

Default 255

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sdp-ping

Synopsis Enable the **sdp-ping** context

Context **configure** *saa owner named-item test named-item type sdp-ping*

Tree *sdp-ping*

Description Commands in this context configure tests on SDPs for unidirectional or round-trip connectivity, as well as for performing SDP MTU path tests.

Notes The following elements are part of a choice: **dns**, **eth-cfm-loopback**, **icmp-ping**, **lsp-ping**, **sdp-ping**, or **vccv-ping**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

count *number*

Synopsis Number of SDP echo request packets to send

Context **configure** *saa owner named-item test named-item type sdp-ping count number*

Tree *count*

Description This command specifies the number of echo request packets to send. Each request must either time out or receive a reply before the next message request is sent. The **interval** value must expire before the next message request is sent.

Range 1 to 100

Units packets

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval *number*

Synopsis Interval between SDP echo request packets sent

Context **configure** *saa owner named-item test named-item type sdp-ping interval number*

Tree *interval*

Range 1 to 10

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

originating-sdp-identifier *number*

Synopsis SDP ID used to send packets

Context **configure** *saa owner named-item test named-item type sdp-ping originating-sdp-identifier number*

Tree *originating-sdp-identifier*

Description This command specifies the SDP ID that is used by SDP ping.
The far-end address of the specified SDP ID is the expected responder ID within each reply received. The SDP ID defines the SDP tunnel encapsulation used to reach the far end. This can be IP/GRE or MPLS. If this ID is invalid, administratively down, or otherwise unavailable, the SDP echo request message is not sent, and an error message is displayed. After the interval timer expires, the SDP ping attempts to send the next request, if required.

Range 1 to 32767

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

qos

Synopsis Enter the **qos** context

Context **configure** *saa owner named-item test named-item type sdp-ping qos*

Tree *qos*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fc *keyword*

Synopsis FC for the transmitted SDP echo request packets

Context **configure** *saa owner named-item test named-item type sdp-ping qos fc keyword*

Tree *fc*

Options
 be – Best Effort
 l2 – Low 2 (best effort)
 af – Assured Forwarding (assured)
 l1 – Low 1 (assured)
 h2 – High 2 (high priority)
 ef – Expedited Forwarding (high priority)
 h1 – High 1 (high priority)
 nc – Network Control (high priority)

Default be

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *keyword*

Synopsis QoS profile for transmitted SDP echo request packets

Context **configure** *saa owner named-item test named-item type sdp-ping qos profile keyword*

Tree *profile*

Options
 in – In profile
 out – Out of profile

Default out

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

responder-sdp-identifier *number*

Synopsis SDP ID used by the far-end to reply to the request

Context **configure** *saa owner named-item test named-item type sdp-ping responder-sdp-identifier number*

Tree *responder-sdp-identifier*

Description This command configures the return SDP ID to be used by the far-end router for the message reply for round-trip SDP connectivity testing.

If this ID does not exist on the far-end router, or terminates on a different router from the originating router, or another issue prevents the far-end router from using this ID, the SDP echo reply is sent using generic IP or GRE OAM encapsulation. The received FC (as mapped on the ingress network interface for the far end) defines the FC encapsulation for the reply message.

Range	1 to 32767
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size number

Synopsis	Size of the SDP echo request packets
Context	configure saa owner named-item test named-item type sdp-ping size number
Tree	size
Description	This command configures the size of the SDP echo request packets, which includes the SDP header and payload. The size does not include the SDP encapsulation, VC label (if applied), or any DLC headers or trailers.
Range	72 to 9786
Units	bytes
Default	72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout number

Synopsis	Maximum time to wait for SDP echo reply packets
Context	configure saa owner named-item test named-item type sdp-ping timeout number
Tree	timeout
Description	This command configures the time the router waits for a message reply after sending the last probe for a specific test. When the timeout expires, the test is marked complete and no more packets are processed.
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner named-item test named-item type sdp-ping trap-generation</i>
Tree	<i>trap-generation</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner named-item test named-item type sdp-ping trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	<p>When configured to true, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner named-item test named-item type sdp-ping trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	<p>This command configures the number of consecutive ping probe failures required to generate a trap.</p> <p>This command has no effect if the probe-fail command is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	configure <i>saa owner named-item test named-item type sdp-ping trap-generation test-complete boolean</i>
Tree	<i>test-complete</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner named-item test named-item type sdp-ping trap-generation test-fail boolean</i>
Tree	<i>test-fail</i>
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner named-item test named-item type sdp-ping trap-generation test-fail-threshold number</i>
Tree	<i>test-fail-threshold</i>
Description	<p>This command configures the number of consecutive test failures required to generate a trap.</p> <p>This command has no effect when test-fail is set to false.</p> <p>This command is not applicable to SAA traceroute tests.</p>
Range	0 to 15
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

4.27 service commands

```

configure
- service
-   apply-groups reference
-   apply-groups-exclude reference
-   cpipe service-name
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   customer reference
-   description description
-   endpoint named-item
-   active-multipath boolean
-   active-multipath-timeout number
-   apply-groups reference
-   apply-groups-exclude reference
-   description description
-   hold-time-active number
-   revert-time (number | keyword)
-   standby-signaling keyword
- network-latency-measurement boolean
- sap sap
-   accounting-policy reference
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   cem
-   asym-delay-control
-   min-repeat number
-   samples number
-   threshold-repeat number
-   packet
-   jitter-buffer number
-   payload-size number
-   report-alarm
-   buffer-overflow boolean
-   buffer-underrun boolean
-   malformed-packets boolean
-   packet-loss boolean
-   remote-fault boolean
-   remote-packet-loss boolean
-   remote-rdi boolean
-   stray-packets boolean
-   rtp-header boolean
-   collect-stats boolean
-   description long-description
-   endpoint reference
-   ingress
-   qos
-   sap-ingress
-   overrides
-   policy-name reference
-   lag
-   service-id number
-   service-mtu number
-   spoke-sdp sdp-bind-id
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   bandwidth (number | keyword)

```

configure service cpipe spoke-sdp control-word

- **control-word** *boolean*
- **description** *description*
- **egress**
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
 - **endpoint**
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **ingress**
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
- **test** *boolean*
- **vc-type** *keyword*
- **customer** *customer-name*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **contact** *description*
- **customer-id** *number*
- **description** *description*
- **multi-service-site** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **assignment**
 - **card** *number*
 - **port** *port-named*
- **description** *description*
- **egress**
 - **agg-rate**
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **policer-control-policy** *reference*
 - **scheduler-policy**
 - **overrides**
 - **scheduler** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **policy-name** *reference*
 - **ingress**
 - **policer-control-policy** *reference*
 - **scheduler-policy**
 - **overrides**
 - **scheduler** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*

configure service customer multi-service-site ingress scheduler-policy overrides scheduler rate

```

    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - phone description
- epipe service-name
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp number
    - adv-service-mtu number
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-template-binding reference
      - apply-groups reference
      - apply-groups-exclude reference
    - endpoint reference
    - import-rt route-target
  - route-distinguisher (keyword | vpn-route-distinguisher)
  - route-target
    - export route-target
    - import route-target
  - vsi-export reference
  - vsi-import reference
- bgp-evpn
  - apply-groups reference
  - apply-groups-exclude reference
  - evi number
  - ignore-mtu-mismatch boolean
  - local-attachment-circuit named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - bgp number
    - endpoint reference
    - eth-tag number
- mpls number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
    - ecmp number
    - enforce-strict-tunnel-tagging boolean
    - enforce-untagged-route keyword
    - resolution keyword
    - resolution-filter
      - bgp boolean
      - ldp boolean
      - rsvp boolean
      - sr-isis boolean
      - sr-ospf boolean
      - sr-ospf3 boolean
      - sr-policy boolean
      - sr-te boolean
      - udp boolean
    - weighted-ecmp boolean
  - control-word boolean
  - default-route-tag one-byte-value
  - domain-id domain-id
  - dynamic-egress-label-limit boolean
  - ecmp number
  - entropy-label boolean
  - evi-three-byte-auto-rt boolean
  - force-vc-forwarding keyword

```

configure service epipe bgp-evpn mpls hash-label

- **hash-label** *boolean*
- **mh-mode** *keyword*
- **oper-group** *reference*
- **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
- **send-tunnel-encap**
 - **mpls** *boolean*
 - **mpls-over-udp** *boolean*
- **remote-attachment-circuit** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bgp** *number*
 - **endpoint** *reference*
 - **eth-tag** *number*
- **bgp-mh-site** *named-item*
 - **activation-timer** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boot-timer** *number*
 - **id** *number*
 - **min-down-timer** *number*
 - **preference** *number*
 - **sap** *sap*
- **bgp-vpws**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ve**
 - **id** *number*
 - **name** *named-item*
 - **remote-ve** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **id** *number*
- **customer** *reference*
- **description** *description*
- **endpoint** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **hold-time-active** *number*
 - **revert-time** (*number | keyword*)
 - **standby-signaling** *keyword*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **load-balancing**
 - **per-service-hashing** *boolean*
- **oper-group** *reference*
- **sap** *sap*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **collect-stats** *boolean*
 - **description** *long-description*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **agg-rate**
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**

configure service epipe sap egress filter ip

- **ip** *reference*
- **ipv6** *reference*
- **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*
 - **sap-egress**
 - **overrides**
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue** *reference*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avg-frame-overhead** *decimal-number*
 - **cbs** (*number* | *keyword*)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **scheduler-policy**
 - **overrides**
 - **scheduler** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*

configure service epipe sap egress qos scheduler-policy overrides scheduler rate

```

- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- endpoint reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais
    - client-meg-level number
    - interface-support boolean
    - interval number
    - low-priority-defect keyword
    - priority number
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - description description
  - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - low-priority-defect keyword
  - mac-address mac-unicast-address-no-zero
  - one-way-delay-threshold number
- ethernet
  - llf
    - admin-state keyword
  - ignore-oper-down boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
        - policy-name reference
      - sap-ingress
        - fp-redirect-group
          - group-name reference
          - instance number
        - overrides
          - policer reference
          - apply-groups reference
          - apply-groups-exclude reference

```

configure service epipe sap ingress qos sap-ingress overrides policer cbs

```

- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- scheduler-policy
- overrides
  - scheduler named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- lag
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node named-item
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- service-id number
- service-mtu number
- spoke-sdp sdp-bind-id
  - accounting-policy reference
  - admin-state keyword
  - adv-service-mtu number
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth (number | keyword)

```

configure service epipe spoke-sdp collect-stats

- **collect-stats** *boolean*
- **control-word** *boolean*
- **description** *description*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
- **vc-label** *number*
- **endpoint**
 - **icb** *boolean*
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**
 - **client-meg-level** *number*
 - **interface-support** *boolean*
 - **interval** *number*
 - **low-priority-defect** *keyword*
 - **priority** *number*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **description** *description*
 - **direction** *keyword*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*
 - **low-priority-defect** *keyword*
 - **mac-address** *mac-unicast-address-no-zero*
 - **one-way-delay-threshold** *number*
- **force-vc-forwarding** *keyword*
- **hash-label**
 - **signal-capability**
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
- **monitor-oper-group** *reference*
- **oper-group** *reference*

configure service epipe spoke-sdp pw-status

- **pw-status**
 - **block-on-peer-fault** *boolean*
 - **signaling** *boolean*
 - **standby-signaling-slave** *boolean*
- **vc-type** *keyword*
- **vlan-vc-tag** *number*
- **test** *boolean*
- **vc-switching** *boolean*
- **vpn-id** *number*
- **ies** *service-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **customer** *reference*
 - **description** *description*
 - **interface** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autoconfigure**
 - **ipv4**
 - **dhcp-client**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **class-id**
 - **ascii-string** *string*
 - **hex-string** *hex-string*
 - **client-id**
 - **ascii-string** *string*
 - **hex-string** *hex-string*
 - **interface**
 - **mac**
 - **lease-time** (*number* | *keyword*)
 - **request-options**
 - **dns-server** *boolean*
 - **router** *boolean*
 - **static-route** *boolean*
 - **description** *very-long-description*
 - **dynamic-tunnel-redundant-nexthop** *ipv4-unicast-address*
 - **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **ipv6**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **if-attribute**
 - **admin-group** *reference*
 - **srlg-group** *reference*
 - **ingress**
 - **ip-mtu** *number*
 - **ip-tunnel-interface** *boolean*
 - **ipsec**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-exception** *reference*

configure service ies interface ipsec ipsec-tunnel

```

- ipsec-tunnel named-item
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd
  - bfd-designate boolean
  - bfd-liveness
    - dest-ip ipv4-unicast-address
    - interface interface-name
    - service-name service-name
- clear-df-bit boolean
- copy-traffic-class-upon-decapsulation boolean
- description description
- encapsulated-ip-mtu number
- icmp-generation
  - frag-required
    - admin-state keyword
    - interval number
    - message-count number
- icmp6-generation
  - packet-too-big
    - admin-state keyword
    - interval number
    - message-count number
- ip-mtu number
- key-exchange
  - dynamic
    - auto-establish boolean
    - auto-establish-sustain boolean
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn fully-qualified-domain-name
      - ipv4 ipv4-unicast-address
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - ppk
      - id reference
      - list reference
    - pre-shared-key encrypted-leaf
    - reverse-route-injection
      - metric number
      - preference number
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key hex-string
      - encryption-key hex-string
      - ipsec-transform reference
      - spi number
- local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
- max-history-key-records
  - esp number
  - ike number
- pmtu-discovery-aging number
- private-sap number

```

configure service ies interface ipsec ipsec-tunnel private-service

- **private-service** *service-name*
- **private-tcp-mss-adjust** *number*
- **propagate-pmtu-v4** *boolean*
- **propagate-pmtu-v6** *boolean*
- **public-tcp-mss-adjust** (*number* | *keyword*)
- **remote-gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **replay-window** *number*
- **security-policy**
 - **id** *number*
 - **strict-match** *boolean*
- **ipv6-exception** *reference*
- **public-sap** *number*
- **tunnel-group** *reference*
- **ipv4**
 - **addresses**
 - **address** *ipv4-unicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-length** *number*
 - **allow-directed-broadcasts** *boolean*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **gi-address** *ipv4-unicast-address*
 - **lease-populate**
 - **max-leases** *number*
 - **option-82**
 - **action** *keyword*
 - **circuit-id**
 - **ascii-tuple**
 - **ifindex**
 - **none**
 - **sap-id**
 - **vlan-ascii-tuple**
 - **remote-id**
 - **ascii-string** *string-not-all-spaces*
 - **mac**
 - **none**
 - **vendor-specific-option**
 - **client-mac-address** *boolean*
 - **pool-name** *boolean*
 - **sap-id** *boolean*
 - **service-id** *boolean*
 - **string** *string-not-all-spaces*
 - **system-id** *boolean*
 - **proxy-server**
 - **admin-state** *keyword*
 - **emulated-server** *ipv4-unicast-address*
 - **lease-time**
 - **radius-override** *boolean*
 - **value** *number*
 - **relay-plain-bootp** *boolean*
 - **relay-proxy**
 - **release-update-src-ip** *boolean*
 - **siaddr-override** *ipv4-unicast-address*

configure service ies interface ipv4 dhcp server

```

- server ipv4-unicast-address
- src-ip-addr keyword
- trusted boolean
- use-arp boolean
- icmp
- mask-reply boolean
- param-problem
-   admin-state keyword
-   number number
-   seconds number
- redirects
-   admin-state keyword
-   number number
-   seconds number
- ttl-expired
-   admin-state keyword
-   number number
-   seconds number
- unreachableables
-   admin-state keyword
-   number number
-   seconds number
- ip-helper-address ipv4-unicast-address
- local-dhcp-server reference
- nat
-   apply-groups reference
-   apply-groups-exclude reference
-   cpm-nat-policy reference
-   cpm-spf-nat-policy reference
- neighbor-discovery
-   host-route
-     populate keyword
-     apply-groups reference
-     apply-groups-exclude reference
-     route-tag number
-   learn-unsolicited boolean
-   limit
-     log-only boolean
-     max-entries number
-     threshold number
-   local-proxy-arp boolean
-   populate boolean
-   proactive-refresh boolean
-   proxy-arp-policy reference
-   remote-proxy-arp boolean
-   retry-timer number
-   static-neighbor ipv4-address
-     apply-groups reference
-     apply-groups-exclude reference
-     mac-address mac-address
-   static-neighbor-unnumbered
-     mac-address mac-address
-   timeout number
- primary
-   address ipv4-unicast-address
-   apply-groups reference
-   apply-groups-exclude reference
-   broadcast keyword
-   prefix-length number
-   tag (number | keyword)
- secondary ipv4-unicast-address
-   apply-groups reference
-   apply-groups-exclude reference
-   broadcast keyword

```

configure service ies interface ipv4 secondary igp-inhibit

- **igp-inhibit** *boolean*
- **prefix-length** *number*
- **tag** (*number* | *keyword*)
- **tcp-mss** *number*
- **unnumbered**
 - **ip-address** *ipv4-unicast-address*
 - **ip-int-name** *interface-name*
 - **system**
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **backup** *ipv4-unicast-address*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *ipv4-address*
 - **interface-name** *interface-name*
 - **service-name** *service-name*
 - **init-delay** *number*
 - **mac** *mac-unicast-address*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **ssh-reply** *boolean*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **ipv6**
 - **address** *ipv6-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-address-detection** *boolean*
 - **eui-64** *boolean*
 - **prefix-length** *number*
 - **primary-preference** *number*
 - **tag** (*number* | *keyword*)
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **relay**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*

configure service ies interface ipv6 dhcp6 relay lease-populate

- **lease-populate**
 - **max-nbr-of-leases** *number*
 - **route-populate**
 - **na** *boolean*
 - **pd**
 - **exclude** *boolean*
 - **ta** *boolean*
- **option**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-id**
 - **ascii-tuple**
 - **if-index**
 - **sap-id**
 - **string** *string-not-all-spaces*
 - **remote-id** *boolean*
 - **server** *ipv6-address-with-zone*
 - **source-address** *ipv6-unicast-or-linklocal-address*
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **link-local-address**
 - **address** *ipv6-address*
 - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
- **learn-unsolicited** *keyword*
- **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
- **local-proxy-nd** *boolean*
- **proactive-refresh** *keyword*
- **proxy-nd-policy** *reference*
- **reachable-time** *number*
- **stale-time** *number*
- **static-neighbor** *ipv6-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service ies interface ipv6 neighbor-discovery static-neighbor mac-address

- **mac-address** *mac-address*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *ipv6-address*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *interface-name*
 - **service-name** *service-name*
- **init-delay** *number*
- **mac** *mac-unicast-address*
- **master-int-inherit** *boolean*
- **message-interval** *number*
- **monitor-oper-group** *reference*
- **ntp-reply** *boolean*
- **oper-group** *reference*
- **owner** *boolean*
- **passive** *boolean*
- **ping-reply** *boolean*
- **policy** *reference*
- **preempt** *boolean*
- **priority** *number*
- **standby-forwarding** *boolean*
- **telnet-reply** *boolean*
- **traceroute-reply** *boolean*
- **load-balancing**
 - **ip-load-balancing** *keyword*
- **loopback** *boolean*
- **mac** *mac-unicast-address*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **multicast-network-domain** *reference*
- **ptp-hw-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **sap** *sap*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **collect-stats** *boolean*
 - **description** *long-description*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **agg-rate**
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*

configure service ies interface sap egress qos policer-control-policy overrides apply-groups-exclude

```

- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
  - min-thresh-separation (number | keyword)
  - priority number
    - apply-groups reference
    - apply-groups-exclude reference
    - mbs-contribution (number | keyword)
- policy-name reference
- sap-egress
- overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- ingress
  - filter

```

configure service ies interface sap ingress filter ip

```

- ip reference
- ipv6 reference
- qos
- policer-control-policy
  - overrides
    - apply-groups reference
    - apply-groups-exclude reference
    - root
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-thresh-separation (number | keyword)
        - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
- fp-redirect-group
  - group-name reference
  - instance number
- overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- scheduler-policy
  - overrides
    - scheduler named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate

```

configure service ies interface sap ingress qos scheduler-policy overrides scheduler rate cir

```

        - cir (number | keyword)
        - pir (number | keyword)
        - policy-name reference
- ip-tunnel interface-name
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - clear-df-bit boolean
  - delivery-service service-name
  - description description
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - dscp keyword
  - encapsulated-ip-mtu number
  - gre-header
    - admin-state keyword
    - key
      - admin-state keyword
      - receive number
      - send number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - number number
      - seconds number
  - ip-mtu number
  - ipsec-transport-mode-profile reference
  - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - reassembly (number | keyword)
  - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- ipsec-gateway named-item
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cert
    - cert-profile reference
    - status-verify
      - default-result keyword
      - primary keyword
      - secondary keyword
    - trust-anchor-profile reference
  - client-db
    - fallback boolean
    - name reference
  - default-secure-service
    - interface interface-name
    - service-name service-name
  - default-tunnel-template reference
  - dhcp-address-assignment
    - dhcpv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - gi-address ipv4-unicast-address

```

configure service ies interface sap ipsec-gateway dhcp-address-assignment dhcpv4 send-release

```

    - send-release boolean
    - server
      - address ipv4-unicast-address
      - router-instance router-instance-base-vprn-loose
  - dhcpv6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - link-address ipv6-unicast-address
    - send-release boolean
    - server
      - address ipv6-unicast-address
      - router-instance router-instance-base-vprn-loose
  - ike-policy reference
  - local
    - address-assignment
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ipv4
        - dhcp-server named-item
        - pool named-item
        - router-instance router-instance-base-vprn-loose
        - secondary-pool named-item
      - ipv6
        - dhcp-server named-item
        - pool named-item
        - router-instance router-instance-base-vprn-loose
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - id
      - auto
      - fqdn fully-qualified-domain-name
      - ipv4 ipv4-unicast-address
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
    - removed-tunnels number
  - mixed-tunnel-mode
  - pre-shared-key encrypted-leaf
  - radius
    - accounting-policy reference
    - authentication-policy reference
  - ts-list reference
  - lag
  - multi-service-site reference
  - spoke-sdp sdp-bind-id
  - accounting-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description description
  - egress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - network
        - policy-name reference
        - port-redirect-group
          - group-name reference
          - instance number
    - vc-label number

```

configure service ies interface spoke-sdp entropy-label

- **entropy-label**
- **hash-label**
 - **signal-capability**
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
 - **vc-type** *keyword*
- **static-tunnel-redundant-nexthop** *ipv4-unicast-address*
- **tos-marking-state** *keyword*
- **tunnel** *boolean*
- **vas-if-type** *keyword*
- **vpls** *named-item-64*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress**
 - **reclassify-using-qos** *reference*
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **evpn**
 - **arp**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **evpn-local-es**
 - **entry-type** *keyword*
 - **retention-timer** *number*
 - **flood-garp-and-unknown-req** *boolean*
 - **learn-dynamic** *boolean*
 - **nd**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **evpn-local-es**
 - **entry-type** *keyword*
 - **retention-timer** *number*
 - **learn-dynamic** *boolean*
 - **ingress**
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **ip-transport** *port*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **dscp-name** *keyword*
 - **filter-unknown-host** *boolean*
 - **local-host**
 - **ip-address** *ipv4-unicast-address*
 - **port-num** *number*
 - **protocol** *keyword*
 - **remote-host** *number*
 - **apply-groups** *reference*

configure service ies ip-transport remote-host apply-groups-exclude

```

    - apply-groups-exclude reference
    - description description
    - ip-address ipv4-unicast-address
    - port-num number
    - remote-host-name string
  - tcp
    - inactivity-timeout number
    - max-retries number
    - retry-interval number
  - service-id number
  - vpn-id number
- mac-list named-item
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - mac mac-address
    - apply-groups reference
    - apply-groups-exclude reference
    - mask mac-address
- md-auto-id
  - customer-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - pw-template-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - service-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - cpm-nat-policy external-named-item
    - alg
      - ftp boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - filtering keyword
    - port-limits
      - dynamic-ports number
      - forwarding number
      - watermarks
        - high number
        - low number
    - session-limits
      - max number
      - watermarks
        - high number
        - low number
  - tcp
    - mss-adjust number
  - timeouts
    - icmp-query number
    - tcp
      - established number
      - syn number
      - time-wait number

```


configure service nat cpm-nat-policy timeouts tcp transitory

```

    - transitory number
    - udp
      - dns number
      - initial number
      - normal number
    - udp
      - inbound-refresh boolean
  - nat-policy external-named-item
    - alg
      - ftp boolean
      - pptp boolean
      - rtsp boolean
      - sip boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - block-limit number
    - description description
    - filtering keyword
    - pool
      - name named-item
      - router-instance string
    - port-limits
      - dynamic-ports number
      - forwarding number
      - watermarks
        - high number
        - low number
    - session-limits
      - max number
      - watermarks
        - high number
        - low number
    - tcp
      - mss-adjust number
    - timeouts
      - icmp-query number
      - tcp
        - established number
        - syn number
        - time-wait number
        - transitory number
      - udp
        - dns number
        - initial number
        - normal number
    - udp
      - inbound-refresh boolean
  - oper-group named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness
      - apply-groups reference
      - apply-groups-exclude reference
      - dest-ip ipv4-unicast-address
      - interface-name interface-name
      - router-instance string
    - hold-time
      - down number
      - up number
  - proxy-arp-nd
    - mac-list
      - list named-item
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service proxy-arp-nd mac-list list mac

```

    - mac mac-unicast-address-no-zero
- pw-template pw-template-name
- accounting-policy number
- allow-fragmentation boolean
- apply-groups reference
- apply-groups-exclude reference
- auto-gre-sdp boolean
- block-on-peer-fault boolean
- collect-stats boolean
- control-word boolean
- egress
- filter
  - ip named-item-64
  - ipv6 named-item-64
  - mac named-item-64
- mfib-allowed-mda-destinations
  - mda slot-mda
- qos
  - network
    - policy-name named-item-64
    - port-redirect-group
      - group-name named-item
      - instance number
- encryption-keygroup
  - inbound number
  - outbound number
- entropy-label
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list named-item
  - discard-unknown-source boolean
  - limit-mac-move keyword
  - mac-learning
    - aging boolean
    - learning boolean
  - mac-pinning boolean
  - maximum-mac-addresses number
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
  - signal-capability
- igmp-snooping
  - fast-leave boolean
  - import-policy named-item
  - maximum-number-groups number
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - send-queries boolean
  - version keyword
- ingress
  - filter
    - ip named-item-64
    - ipv6 named-item-64
    - mac named-item-64
  - qos
    - network
      - fp-redirect-group
        - group-name named-item
        - instance number
        - policy-name named-item-64
- l2pt
  - termination

```

configure service pw-template l2pt termination protocols

```

    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
    - path-mtu number
    - provisioned-sdp keyword
    - pw-template-id number
    - sdp-exclude reference
    - sdp-include reference
    - split-horizon-group
      - description description
    - fdb
      - saps
        - auto-learn-mac-protect boolean
        - discard-unprotected-dest-mac boolean
        - protected-src-mac-violation-action keyword
    - name named-item
    - stp
      - admin-state keyword
      - auto-edge boolean
      - edge-port boolean
      - link-type keyword
      - path-cost number
      - priority number
      - root-guard boolean
    - vc-type keyword
    - vlan-vc-tag number
  - sdp number
    - accounting-policy reference
    - admin-state keyword
    - adv-mtu-override boolean
    - allow-fragmentation boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - bgp-tunnel boolean
    - booking-factor number
    - collect-stats boolean
    - delivery-type keyword
    - description description
    - far-end
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - keep-alive
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - hello-time number
      - hold-down-time number
      - maximum-drop-count number
      - message-length number
      - timeout number
    - ldp boolean
    - local-end (ipv4-address-no-zone | ipv6-address-no-zone)
    - lsp named-item-64
    - metric number
    - mixed-lsp-mode
      - revert-time (number | keyword)
    - network-domain reference
    - path-mtu number
    - sdp-group reference
    - signaling keyword
    - sr-isis boolean

```

configure service sdp sr-ospf

- **sr-ospf** *boolean*
- **tunnel-far-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **vlan-vc-etype** *etype-value*
- **weighted-ecmp** *boolean*
- **sdp-group**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-name** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
- **system**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bgp**
 - **evpn**
 - **ad-per-es-route**
 - **extended-evi-range** *boolean*
 - **route-distinguisher-ip-address** *ipv4-address*
 - **route-target-type** *keyword*
 - **ad-per-evi-routes**
 - **attribute-propagation** *boolean*
 - **bgp-path-selection** *boolean*
 - **d-path-ignore** *boolean*
 - **ethernet-segment** *named-item*
 - **ac-df-capability** *keyword*
 - **admin-state** *keyword*
 - **advertise-ifl-host-ad-routes**
 - **bgp-evpn-instance** *number*
 - **route-tag** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **association**
 - **lag** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **virtual-ranges**
 - **dot1q**
 - **q-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** (*number* | *keyword*)
 - **qinq**
 - **s-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** (*number* | *keyword*)
 - **s-tag-c-tag** (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **c-tag-end** (*number* | *keyword*)
 - **port** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **virtual-ranges**
 - **dot1q**
 - **q-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** (*number* | *keyword*)
 - **qinq**
 - **s-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service system bgp evpn ethernet-segment association port virtual-ranges qinq s-tag end

```

    - end (number | keyword)
    - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - c-tag-end (number | keyword)
  - vprn-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - virtual-ranges
      - evi number
  - auto-esi keyword
  - df-election
  - es-activation-timer number
  - manual
    - evi number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - preference
      - apply-groups reference
      - apply-groups-exclude reference
      - mode keyword
      - value number
    - service-carving-mode keyword
  - esi ethernet-segment-id-mac-based
  - layer-3-neighbor-synchronization boolean
  - multi-homing-mode keyword
  - oper-group reference
  - orig-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - route-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - type keyword
  - ip-prefix-routes
    - interface-ful
      - attribute-uniform-propagation boolean
      - bgp-path-selection boolean
      - d-path-length-ignore boolean
  - mpls
  - multicast-leave-sync-propagation number
  - route-distinguisher vpn-route-distinguisher
- bgp-auto-rd-range
  - apply-groups reference
  - apply-groups-exclude reference
  - community-value
    - end number
    - start number
  - ip-address ipv4-address
- fdb
  - apply-groups reference
  - apply-groups-exclude reference
  - table-size number
- vpn-gre-source-ip ipv4-unicast-address
- vpls service-name
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp number
    - adv-service-mtu number
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-template-binding reference
      - apply-groups reference
      - apply-groups-exclude reference
    - import-rt route-target
    - monitor-oper-group reference

```

configure service vpls bgp pw-template-binding oper-group

- **oper-group** *reference*
- **split-horizon-group** *named-item*
- **route-distinguisher** (*keyword* | *vpn-route-distinguisher*)
- **route-target**
 - **export** *route-target*
 - **import** *route-target*
- **vsi-export** *reference*
- **vsi-import** *reference*
- **bgp-ad**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **vpls-id** *vpls-id*
 - **vsi-id-prefix** *ipv4-address*
- **bgp-evpn**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp**
 - **description** *description*
 - **snoop** *boolean*
 - **dhcp6**
 - **description** *description*
 - **ldra**
 - **interface-type** *keyword*
- **evi** *number*
- **ignore-mtu-mismatch** *boolean*
- **incl-mcast-orig-ip** *ipv4-unicast-address*
- **mac-duplication**
 - **blackhole** *boolean*
 - **detect**
 - **num-moves** *number*
 - **trusted-mac-move-factor** *number*
 - **window** *number*
 - **retry** (*number* | *keyword*)
 - **trusted-mac-time** *number*
- **mpls** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bind-tunnel**
 - **allow-flex-algo-fallback** *boolean*
 - **ecmp** *number*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **enforce-untagged-route** *keyword*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
 - **udp** *boolean*
 - **weighted-ecmp** *boolean*
 - **control-word** *boolean*
 - **default-route-tag** *one-byte-value*
 - **dynamic-egress-label-limit** *boolean*
 - **ecmp** *number*
 - **entropy-label** *boolean*
 - **evi-three-byte-auto-rt** *boolean*
 - **fdb**
 - **protected-src-mac-violation-action** *keyword*

configure service vpls bgp-evpn mpls force-vc-forwarding

- **force-vc-forwarding** *keyword*
- **hash-label** *boolean*
- **ingress-replication-bum-label** *boolean*
- **mh-mode** *keyword*
- **oper-group** *reference*
- **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
- **send-tunnel-encap**
 - **mpls** *boolean*
 - **mpls-over-udp** *boolean*
- **split-horizon-group** *reference*
- **per-pe-etree-leaf**
 - **blackhole-non-local-leaf-macs** *boolean*
- **routes**
 - **incl-mcast**
 - **advertise-ingress-replication** *boolean*
 - **advertise-l2-attributes** *boolean*
 - **ip-prefix**
 - **advertise** *boolean*
 - **domain-id** *domain-id*
 - **include-direct-interface-host** *boolean*
 - **link-bandwidth**
 - **advertise**
 - **max-dynamic-weight** *number*
 - **weight** (*number* | *keyword*)
 - **weighted-ecmp** *boolean*
 - **mac-ip**
 - **advertise** *boolean*
 - **arp-nd-extended-community** *boolean*
 - **arp-nd-only-with-fdb-advertisement** *boolean*
 - **cfm-mac** *boolean*
 - **unknown-mac** *boolean*
 - **sel-mcast**
 - **advertise** *boolean*
 - **vlan-aware-bundle-eth-tag** *number*
 - **vlan-aware-bundle** *named-item*
- **bgp-mh-site** *named-item*
 - **activation-timer** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boot-timer** *number*
 - **failed-threshold** (*number* | *keyword*)
 - **id** *number*
 - **mesh-sdp-binds**
 - **min-down-timer** *number*
 - **monitor-oper-group** *reference*
 - **sap** *sap*
 - **shg-name** *named-item*
 - **spoke-sdp** *sdp-bind-id*
- **bgp-vpls**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **maximum-ve-id** *number*
 - **ve**
 - **id** *number*
 - **name** *named-item*
- **customer** *reference*
- **description** *description*
- **endpoint** *named-item*
- **apply-groups** *reference*

configure service vpls endpoint apply-groups-exclude

- **apply-groups-exclude** *reference*
- **block-on-mesh-failure** *boolean*
- **description** *description*
- **fdb**
 - **auto-learn-mac-protect** *boolean*
 - **mac-pinning** *boolean*
 - **maximum-mac-addresses** *number*
 - **protected-src-mac-violation-action** *keyword*
- **ignore-standby-signaling** *boolean*
- **mc-endpoint** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mc-ep-peer**
 - **name** *named-item*
 - **peer-address** *reference*
- **revert-time** (*number* | *keyword*)
- **suppress-standby-signaling** *boolean*
- **fdb**
 - **discard-unknown** *boolean*
- **mac-learning**
 - **aging** *boolean*
 - **learning** *boolean*
 - **local-age-time** *number*
 - **remote-age-time** *number*
- **mac-move**
 - **admin-state** *keyword*
 - **hold-down-time** *number*
 - **move-frequency** *number*
 - **primary-cumulative-factor** *number*
 - **retry-count** (*number* | *keyword*)
 - **sap** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **secondary-cumulative-factor** *number*
 - **spoke-sdp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
- **mac-subnet-length** *number*
- **selective-learning** *boolean*
- **static-mac**
 - **mac** *mac-unicast-address-no-zero*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole**
 - **endpoint** *reference*
 - **mesh-sdp** *reference*
 - **monitor** *keyword*
 - **sap** *reference*
 - **spoke-sdp** *reference*
- **table**
 - **high-wmark** *number*
 - **low-wmark** *number*
 - **size** *number*
- **igmp-snooping**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **query-interval** *number*
 - **query-source-address** (*keyword* | *ipv4-address*)
 - **report-source-address** *ipv4-address*
 - **robust-count** *number*
- **ignore-l2vpn-mtu-mismatch** *boolean*

configure service vpls interface

```

- interface interface-name
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description very-long-description
- hold-time
- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipv4
  - neighbor-discovery
    - static-neighbor ipv4-address
      - apply-groups reference
      - apply-groups-exclude reference
      - mac-address mac-address
    - timeout number
  - primary
    - address ipv4-address
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
  - mac mac-unicast-address
- isid-policy
  - entry number
    - advertise-local boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - range
      - end number
      - start number
    - use-def-mcast boolean
- load-balancing
  - per-service-hashing boolean
- m-vpls boolean
- mac-flush
  - tldp
    - propagate boolean
    - send-on-failure boolean
- mac-protect
  - mac mac-address
- mcast-ipv6-snooping-scope keyword
- mcr-default-gtw
  - apply-groups reference
  - apply-groups-exclude reference
  - ip ipv4-unicast-address
  - mac mac-address
- mesh-sdp sdp-bind-id
  - accounting-policy reference
  - admin-state keyword
  - adv-service-mtu number
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - control-word boolean
  - description description
  - dhcp
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - snoop boolean
  - dhcp6

```

configure service vpls mesh-sdp dhcp6 apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *description*
- **ldra**
 - **interface-type** *keyword*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mfib-allowed-mda-destinations**
 - **mda** *slot-mda*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**
 - **client-meg-level** *number*
 - **interface-support** *boolean*
 - **interval** *number*
 - **low-priority-defect** *keyword*
 - **priority** *number*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **description** *description*
 - **direction** *keyword*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*
 - **low-priority-defect** *keyword*
 - **mac-address** *mac-unicast-address-no-zero*
 - **one-way-delay-threshold** *number*
- **fdb**
 - **auto-learn-mac-protect** *boolean*
 - **auto-learn-mac-protect-exclude-list** *reference*
 - **mac-pinning** *boolean*
 - **protected-src-mac-violation-action** *keyword*
- **force-vc-forwarding** *keyword*
- **hash-label**
 - **signal-capability**
- **igmp-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fast-leave** *boolean*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*

configure service vpls mesh-sdp igmp-snooping mrouter-port

```

- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group ipv4-multicast-address
    - apply-groups reference
    - apply-groups-exclude reference
    - source ipv4-unicast-address
    - starg
  - version keyword
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
      - policy-name reference
  - vc-label number
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group ipv6-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv6-unicast-address
      - starg
    - version keyword
- vc-type keyword
- vlan-vc-tag number
- mfib
  - table
    - high-wmark number
    - low-wmark number
    - size number
- mld-snooping
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - query-interval number
  - query-source-address (keyword | ipv6-address)
  - report-source-address ipv6-address
  - robust-count number
- proxy-arp
  - admin-state keyword
  - age-time (number | keyword)
  - apply-groups reference

```

configure service vpls proxy-arp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **duplicate-detect**
 - **anti-spoof-mac** *mac-unicast-address-no-zero*
 - **hold-down-time** (*number* | *keyword*)
 - **num-moves** *number*
 - **static-blackhole** *boolean*
 - **window** *number*
- **dynamic-arp**
 - **ip-address** *ipv4-unicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-list** *reference*
 - **resolve-retry-time** *number*
 - **sap** *reference*
- **dynamic-populate** *boolean*
- **evpn**
 - **flood**
 - **gratuitous-arp** *boolean*
 - **unknown-arp-req** *boolean*
 - **route-tag** *number*
- **evpn-local-es**
 - **advertise** *boolean*
 - **retention-timer** *number*
- **flood**
 - **received-gratuitous-arp** *boolean*
 - **received-unknown-arp-req** *boolean*
- **process-arp-probes** *boolean*
- **restrict-non-configured-ip-address**
 - **sponge-mac** *mac-unicast-address-no-zero*
- **send-refresh** (*number* | *keyword*)
- **static-arp**
 - **ip-address** *ipv4-unicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *mac-unicast-address-no-zero*
- **table-size** *number*
- **proxy-nd**
 - **admin-state** *keyword*
 - **age-time** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-detect**
 - **anti-spoof-mac** *mac-unicast-address-no-zero*
 - **hold-down-time** (*number* | *keyword*)
 - **num-moves** *number*
 - **static-blackhole** *boolean*
 - **window** *number*
 - **dynamic-neighbor**
 - **ip-address** *ipv6-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-list** *reference*
 - **resolve-retry-time** *number*
 - **sap** *reference*
 - **dynamic-populate** *boolean*
 - **evpn**
 - **advertise-neighbor-type** *keyword*
 - **flood**
 - **unknown-neighbor-advertise-host** *boolean*
 - **unknown-neighbor-advertise-router** *boolean*
 - **unknown-neighbor-solicitation** *boolean*
 - **route-tag** *number*
 - **evpn-local-es**
 - **advertise** *boolean*

configure service vpls proxy-nd evpn-local-es retention-timer

- **retention-timer** *number*
- **flood**
 - **received-unknown-neighbor-advertise-host** *boolean*
 - **received-unknown-neighbor-advertise-router** *boolean*
 - **received-unknown-neighbor-solicitation** *boolean*
- **process-dad-neighbor-solicitations** *boolean*
- **restrict-non-configured-ip-address**
 - **sponge-mac** *mac-unicast-address-no-zero*
- **send-refresh** (*number* | *keyword*)
- **static-neighbor**
 - **ip-address** *ipv6-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *mac-unicast-address-no-zero*
 - **type** *keyword*
- **table-size** *number*
- **routed-vpls**
 - **multicast**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4**
 - **ipv6**
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **sap** *sap*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arp-reply-agent** *keyword*
 - **bandwidth** *number*
 - **bgp-vpls-mh-veid** *number*
 - **bpdu-translation** *keyword*
 - **collect-stats** *boolean*
 - **description** *long-description*
 - **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **lease-populate**
 - **max-leases** *number*
 - **option-82**
 - **action** *keyword*
 - **circuit-id**
 - **ascii-tuple**
 - **hex-string** *hex-string*
 - **none**
 - **vlan-ascii-tuple**
 - **remote-id**
 - **ascii-string** *string-not-all-spaces*
 - **hex-string** *hex-string*
 - **mac**
 - **none**
 - **vendor-specific-option**
 - **client-mac-address** *boolean*
 - **sap-id** *boolean*
 - **service-id** *boolean*
 - **string** *string-not-all-spaces*
 - **system-id** *boolean*
 - **proxy-server**
 - **admin-state** *keyword*
 - **emulated-server** *ipv4-unicast-address*
 - **lease-time**

configure service vpls sap dhcp proxy-server lease-time radius-override

```

    - radius-override boolean
    - value number
  - snoop boolean
- dhcp6
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - ldra
    - interface-type keyword
  - options
    - interface-id
    - ascii-tuple
    - vlan-ascii-tuple
    - remote-id
    - mac
    - string string
- dist-cpu-protection reference
- egress
  - agg-rate
    - queue-frame-based-accounting boolean
    - rate number
  - dest-mac-rewrite mac-unicast-address-no-zero
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
              - apply-groups reference
              - apply-groups-exclude reference
              - mbs-contribution (number | keyword)
        - policy-name reference
    - sap-egress
      - overrides
        - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - avg-frame-overhead decimal-number
      - cbs (number | keyword)
      - drop-tail
        - low

```

configure service vpls sap egress qos sap-egress overrides queue drop-tail low percent-reduction-from-mbs

```

    - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
  - scheduler-policy
    - overrides
      - scheduler named-item
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais
    - client-meg-level number
    - interface-support boolean
    - interval number
    - low-priority-defect keyword
    - priority number
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - description description
  - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - low-priority-defect keyword
  - mac-address mac-unicast-address-no-zero
  - one-way-delay-threshold number
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list reference
  - discard-unknown-source boolean
  - discard-unprotected-dest-mac boolean
  - limit-mac-move keyword
  - mac-learning
    - aging boolean

```

configure service vpls sap fdb mac-learning learning

```

    - learning boolean
    - mac-pinning boolean
    - maximum-mac-addresses number
    - protected-src-mac-violation-action keyword
  - i-vpls-mac-flush
    - bgp-evpn
  - igmp-snooping
    - apply-groups reference
    - apply-groups-exclude reference
    - fast-leave boolean
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - mrouter-port boolean
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - robust-count number
    - router-alert-check boolean
    - send-queries boolean
  - static
    - group ipv4-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv4-unicast-address
      - starg
    - version keyword
  - ingress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - policer-control-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - root
            - max-rate (number | keyword)
            - priority-mbs-thresholds
              - min-thresh-separation (number | keyword)
              - priority number
                - apply-groups reference
                - apply-groups-exclude reference
                - mbs-contribution (number | keyword)
            - policy-name reference
        - sap-ingress
          - fp-redirect-group
            - group-name reference
            - instance number
          - overrides
            - policer reference
              - apply-groups reference
              - apply-groups-exclude reference
              - cbs (number | keyword)
              - mbs (number | keyword)
              - packet-byte-offset number
              - percent-rate
                - cir decimal-number
                - pir decimal-number
              - rate
                - cir (number | keyword)
                - pir (number | keyword)
            - stat-mode keyword

```


configure service vpls sap ingress qos sap-ingress overrides queue

```

- queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
- policy-name reference
- scheduler-policy
  - overrides
    - scheduler named-item
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- l2pt
  - force-boundary
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
  - termination
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
- lag
- managed-vlan-list
  - range string
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node named-item
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference

```

configure service vpls sap mld-snooping fast-leave

- **fast-leave** *boolean*
- **import-policy** *reference*
- **maximum-number-groups** *number*
- **mrouter-port** *boolean*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **router-alert-check** *boolean*
- **send-queries** *boolean*
- **static**
 - **group** *ipv6-multicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *ipv6-unicast-address*
 - **starg**
- **version** *keyword*
- **monitor-oper-group** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **process-cpm-traffic-on-sap-down** *boolean*
- **split-horizon-group** *reference*
- **stp**
 - **admin-state** *keyword*
 - **auto-edge** *boolean*
 - **edge-port** *boolean*
 - **link-type** *keyword*
 - **mst-instance** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mst-path-cost** *number*
 - **mst-port-priority** *number*
 - **path-cost** *number*
 - **port-num** *number*
 - **priority** *number*
 - **root-guard** *boolean*
- **service-id** *number*
- **service-mtu** *number*
- **split-horizon-group** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
- **fdb**
 - **saps**
 - **auto-learn-mac-protect** *boolean*
 - **auto-learn-mac-protect-exclude-list** *reference*
 - **discard-unprotected-dest-mac** *boolean*
 - **protected-src-mac-violation-action** *keyword*
- **spoke-sdp** *sdp-bind-id*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **adv-service-mtu** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block-on-mesh-failure** *boolean*
 - **bpdu-translation** *keyword*
 - **collect-stats** *boolean*
 - **control-word** *boolean*
 - **description** *description*
 - **dhcp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **snoop** *boolean*

configure service vpls spoke-sdp dhcp6

- **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **ldra**
 - **interface-type** *keyword*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mfib-allowed-mda-destinations**
 - **mda** *slot-mda*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
- **vc-label** *number*
- **endpoint**
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**
 - **client-meg-level** *number*
 - **interface-support** *boolean*
 - **interval** *number*
 - **low-priority-defect** *keyword*
 - **priority** *number*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **description** *description*
 - **direction** *keyword*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*
 - **low-priority-defect** *keyword*
 - **mac-address** *mac-unicast-address-no-zero*
 - **one-way-delay-threshold** *number*
 - **fdb**
 - **auto-learn-mac-protect** *boolean*
 - **auto-learn-mac-protect-exclude-list** *reference*
 - **discard-unknown-source** *boolean*
 - **limit-mac-move** *keyword*
 - **mac-learning**
 - **aging** *boolean*
 - **learning** *boolean*
 - **mac-pinning** *boolean*
 - **maximum-mac-addresses** *number*
 - **protected-src-mac-violation-action** *keyword*
 - **force-vc-forwarding** *keyword*

configure service vpls spoke-sdp hash-label

- **hash-label**
 - **signal-capability**
- **igmp-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fast-leave** *boolean*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
 - **mrouter-port** *boolean*
 - **query-interval** *number*
 - **query-last-member-interval** *number*
 - **query-response-interval** *number*
 - **robust-count** *number*
 - **router-alert-check** *boolean*
 - **send-queries** *boolean*
 - **static**
 - **group** *ipv4-multicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *ipv4-unicast-address*
 - **starg**
 - **version** *keyword*
- **ignore-standby-signaling** *boolean*
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
- **l2pt**
 - **termination**
 - **protocols**
 - **cdp** *boolean*
 - **dtp** *boolean*
 - **pagp** *boolean*
 - **stp** *boolean*
 - **udld** *boolean*
 - **vtp** *boolean*
- **mld-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fast-leave** *boolean*
 - **import-policy** *reference*
 - **maximum-number-groups** *number*
 - **mrouter-port** *boolean*
 - **query-interval** *number*
 - **query-last-member-interval** *number*
 - **query-response-interval** *number*
 - **robust-count** *number*
 - **router-alert-check** *boolean*
 - **send-queries** *boolean*
 - **static**
 - **group** *ipv6-multicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *ipv6-unicast-address*
 - **starg**

configure service vpls spoke-sdp mld-snooping version

```

- version keyword
- monitor-oper-group reference
- oper-group reference
- pw-status
  - signaling boolean
- split-horizon-group reference
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - port-num number
  - priority number
  - root-guard boolean
- vc-type keyword
- vlan-vc-tag number
- stp
  - admin-state keyword
  - forward-delay number
  - hello-time number
  - hold-count number
  - maximum-age number
  - mode keyword
  - mst-instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - mst-priority number
    - vlan-range string
  - mst-maximum-hops number
  - mst-name named-item
  - mst-revision number
  - priority number
- temp-flooding number
- tunnel-elmi boolean
- vpn-id number
- vprn service-name
- aaa
  - remote-servers
    - radius
      - access-algorithm keyword
      - accounting boolean
      - accounting-port number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authorization boolean
      - interactive-authentication boolean
      - port number
      - server number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference
        - authenticator keyword
        - secret encrypted-leaf
        - tls-client-profile reference
      - server-retry number
      - server-timeout number
      - use-default-template boolean
    - tacplus
      - accounting
        - record-type keyword
      - admin-state keyword
      - apply-groups reference

```

configure service vpn aaa remote-servers tacplus apply-groups-exclude

```

- apply-groups-exclude reference
- authorization
  - request-format
    - access-operation-cmd keyword
  - use-priv-lvl boolean
- ignore-unknown-mandatory-vsas boolean
- interactive-authentication boolean
- priv-lvl-map
  - priv-lvl number
    - apply-groups reference
    - apply-groups-exclude reference
    - user-profile-name reference
- server number
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - port number
  - secret encrypted-leaf
  - tls-connection
    - sni
      - host-name fully-qualified-domain-name
    - tls-client-profile reference
    - tls-port number
  - server-retry-timeout (number | keyword)
  - server-timeout number
  - service-request
    - nokia-grpc-rpc-authorization boolean
    - nokia-netconf-base-op-authorization boolean
    - nokia-user boolean
    - nokia-user-profile boolean
  - single-connection boolean
  - use-default-template boolean
- admin-state keyword
- aggregates
  - aggregate (ipv4-prefix | ipv6-prefix)
    - aggregator
      - address ipv4-unicast-address
      - as-number number
    - apply-groups reference
    - apply-groups-exclude reference
    - as-set boolean
    - blackhole
      - generate-icmp boolean
    - community community
    - description description
    - discard-component-communities boolean
    - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
    - local-preference number
    - policy reference
    - summary-only boolean
    - tunnel-group number
  - apply-groups reference
  - apply-groups-exclude reference
- allow-export-bgp-vpn boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bgp
  - admin-state keyword
  - advertise-inactive boolean
  - advertise-ipv6-next-hops
    - ipv4 boolean
  - aggregator-id-zero boolean
  - apply-groups reference

```

configure service vprn bgp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **asn-4-byte** *boolean*
- **attribute-set**
 - **remove** *boolean*
- **authentication-key** *encrypted-leaf*
- **authentication-keychain** *reference*
- **backup-path**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **best-path-selection**
 - **always-compare-med**
 - **med-value** *keyword*
 - **strict-as** *boolean*
- **as-path-ignore**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **compare-origin-validation-state** *boolean*
- **deterministic-med** *boolean*
- **ebgp-ibgp-equal**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **ignore-nh-metric** *boolean*
- **ignore-router-id**
- **origin-invalid-unusable** *boolean*
- **bfd-liveness** *boolean*
- **bfd-strict-mode**
 - **advertise**
 - **holdtime** *number*
 - **next-hop-reachability** *boolean*
- **client-reflect** *boolean*
- **cluster**
 - **cluster-id** *ipv4-address*
- **connect-retry** *number*
- **convergence**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-wait-to-advertise** *number*
 - **min-wait-to-advertise** *number*
- **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **description** *description*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
- **eibgp-loadbalance** *boolean*

configure service vpn bgp enforce-first-as

- **enforce-first-as** *boolean*
- **error-handling**
 - **legacy-mode** *boolean*
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
- **family**
 - **flow-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **group** *named-item-64*
 - **admin-state** *keyword*
 - **advertise-inactive** *boolean*
 - **advertise-ipv6-next-hops**
 - **ipv4** *boolean*
 - **aggregator-id-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-override** *boolean*
 - **asn-4-byte** *boolean*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **bfd**
 - **multiplier** *number*
 - **receive-interval** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **bfd-liveness** *boolean*
 - **bfd-strict-mode**
 - **advertise**
 - **holdtime** *number*
 - **next-hop-reachability** *boolean*
 - **capability-negotiation** *boolean*
 - **client-reflect** *boolean*
 - **cluster**
 - **cluster-id** *ipv4-address*
 - **connect-retry** *number*
 - **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**

configure service vpn bgp group damp-peer-oscillations idle-hold-time initial-wait

```

    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- description description
- dynamic-neighbor
  - interface reference
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference
    - max-sessions number
  - match
    - prefix (ipv4-prefix | ipv6-prefix)
      - allowed-peer-as string
      - apply-groups reference
      - apply-groups-exclude reference
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- evpn-link-bandwidth
  - add-to-received-bgp number
- export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- extended-nh-encoding
  - ipv4 boolean
- family
  - flow-ipv6 boolean
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - mcast-ipv4 boolean
  - mcast-ipv6 boolean
- fast-external-failover boolean
- graceful-restart
  - gr-notification boolean
  - long-lived
    - advertise-stale-to-all-neighbors boolean
    - advertised-stale-time number
    - family keyword
      - advertised-stale-time number
      - apply-groups reference
      - apply-groups-exclude reference
      - helper-override-stale-time number
    - forwarding-bits-set keyword
    - helper-override-restart-time number
    - helper-override-stale-time number
    - without-no-export boolean
  - restart-time number
  - stale-routes-time number
- hold-time
  - minimum-hold-time number
  - seconds number

```

configure service vpn bgp group import

```

- import
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
- accept-from-ebgp
-   ipv4 boolean
-   ipv6 boolean
-   label-ipv4 boolean
- add-to-received-ebgp
-   ipv4 boolean
-   ipv6 boolean
-   label-ipv4 boolean
- aggregate-used-paths
-   ipv4 boolean
-   ipv6 boolean
-   label-ipv4 boolean
- send-to-ebgp
-   ipv4 boolean
-   ipv6 boolean
-   label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
-   as-number number
-   prepend-global-as boolean
-   private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- origin-validation
-   ipv4 boolean
-   ipv6 boolean
-   label-ipv4 boolean
- passive boolean
- path-mtu-discovery boolean
- peer-as number
- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   hold-excess number
-   idle-timeout number
-   log-only boolean
-   maximum number
-   post-import boolean
-   threshold number
- remove-private
-   limited boolean
-   replace boolean
-   skip-peer-as boolean
- send-communities
-   extended boolean
-   large boolean
-   standard boolean
- send-default

```

configure service vprn bgp group send-default export-policy

```

    - export-policy reference
    - ipv4 boolean
    - ipv6 boolean
  - split-horizon boolean
  - static-group boolean
  - tcp-mss (number | keyword)
  - third-party-nexthop boolean
  - ttl-security number
  - type keyword
- hold-time
  - minimum-hold-time number
  - seconds number
- ibgp-multipath boolean
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- multihop number
- multipath
  - ebgp number
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ebgp number
    - ibgp number
    - max-paths number
    - restrict keyword
    - unequal-cost boolean
  - ibgp number
  - max-paths number
  - restrict keyword
  - unequal-cost boolean
- neighbor (ipv4-address-with-zone | ipv6-address-with-zone)
  - admin-state keyword
  - advertise-inactive boolean
  - advertise-ipv6-next-hops
    - ipv4 boolean
  - aggregator-id-zero boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - as-override boolean
  - asn-4-byte boolean
  - authentication-key encrypted-leaf
  - authentication-keychain reference
  - bfd
    - multiplier number
    - receive-interval number
    - transmit-interval number
    - type keyword
  - bfd-liveness boolean
  - bfd-strict-mode
    - advertise

```

configure service vprn bgp neighbor bfd-strict-mode advertise holdtime

```

- holdtime number
- next-hop-reachability boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
- cluster-id ipv4-address
- connect-retry number
- damp-peer-oscillations
- error-interval number
- idle-hold-time
- initial-wait number
- max-wait number
- second-wait number
- damping boolean
- default-label-preference
- ebgp number
- ibgp number
- default-preference
- ebgp number
- ibgp number
- description description
- ebgp-default-reject-policy
- export boolean
- import boolean
- enforce-first-as boolean
- error-handling
- update-fault-tolerance boolean
- evpn-link-bandwidth
- add-to-received-bgp number
- export
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- extended-nh-encoding
- ipv4 boolean
- family
- flow-ipv6 boolean
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- fast-external-failover boolean
- graceful-restart
- gr-notification boolean
- long-lived
- advertise-stale-to-all-neighbors boolean
- advertised-stale-time number
- family keyword
- advertised-stale-time number
- apply-groups reference
- apply-groups-exclude reference
- helper-override-stale-time number
- forwarding-bits-set keyword
- helper-override-restart-time number
- helper-override-stale-time number
- without-no-export boolean
- restart-time number
- stale-routes-time number
- group reference
- hold-time
- minimum-hold-time number
- seconds number
- import

```

configure service vprn bgp neighbor import apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
- passive boolean
- path-mtu-discovery boolean
- peer-as number
- peer-creation-type keyword
- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hold-excess number
  - idle-timeout number
  - log-only boolean
  - maximum number
  - post-import boolean
  - threshold number
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- send-communities
  - extended boolean
  - large boolean
  - standard boolean
- send-default

```

configure service vprn bgp neighbor send-default export-policy

- **export-policy** *reference*
- **ipv4** *boolean*
- **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **next-hop-resolution**
 - **policy** *reference*
 - **use-bgp-routes** *boolean*
 - **use-leaked-routes**
 - **static** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **rapid-update**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **rapid-withdrawal** *boolean*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **rib-management**
 - **ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **label-ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **label-ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **router-id** *ipv4-address*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**

configure service vprn bgp send-default export-policy

- **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** *number*
- **third-party-nexthop** *boolean*
- **bgp-evpn**
 - **mpls** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bind-tunnel**
 - **allow-flex-algo-fallback** *boolean*
 - **ecmp** *number*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **enforce-untagged-route** *keyword*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
 - **udp** *boolean*
 - **default-route-tag** *one-byte-value*
 - **domain-id** *domain-id*
 - **dynamic-egress-label-limit** *boolean*
 - **evi** *number*
 - **evpn-link-bandwidth**
 - **advertise**
 - **max-dynamic-weight** *number*
 - **weight** (*number* | *keyword*)
 - **weighted-ecmp** *boolean*
 - **gateway-ip**
 - **advertise** *boolean*
 - **resolve** *boolean*
 - **route-distinguisher** (*string* | *keyword*)
 - **send-tunnel-encap**
 - **mpls** *boolean*
 - **mpls-over-udp** *boolean*
 - **static-service-label** *number*
 - **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **vrf-target**
 - **community** *route-target*
 - **export-community** *route-target*
 - **import-community** *route-target*
- **bgp-ipvprn**
 - **attribute-set**
 - **export** *boolean*
 - **import** *keyword*
 - **mpls**
 - **admin-state** *keyword*
 - **auto-bind-tunnel**
 - **allow-flex-algo-fallback** *boolean*

configure service vpn bgp-ipvpn mpls auto-bind-tunnel apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ecmp** *number*
- **enforce-strict-tunnel-tagging** *boolean*
- **enforce-untagged-route** *keyword*
- **resolution** *keyword*
- **resolution-filter**
 - **bgp** *boolean*
 - **gre** *boolean*
 - **ldp** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
- **static-blackhole-first** *boolean*
- **weighted-ecmp** *boolean*
- **domain-id** *domain-id*
- **dynamic-egress-label-limit** *boolean*
- **route-distinguisher** (*string* | *keyword*)
- **static-service-label** *number*
- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *route-target*
 - **export-community** *route-target*
 - **import-community** *route-target*
- **bgp-shared-queue**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **bgp-vpn-backup**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **carrier-carrier-vpn** *boolean*
- **confederation**
 - **confed-as-num** *number*
 - **members** *number*
- **customer** *reference*
- **d-path-length-ignore** *boolean*
- **description** *description*
- **dhcp-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcpv4** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*

configure service vprn dhcp-server dhcpv4 failover peer apply-groups-exclude

```

    - apply-groups-exclude reference
    - sync-tag named-item
    - startup-wait-time number
- force-renews boolean
- lease-hold
  - additional-scenarios
    - fwa-address-assignment boolean
    - internal-lease-ipsec boolean
    - solicited-release boolean
  - time number
- pool named-item
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - failover
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ignore-mclt-on-takeover boolean
    - maximum-client-lead-time number
    - partner-down-delay number
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag named-item
    - startup-wait-time number
  - max-lease-time number
  - min-lease-time number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - nak-non-matching-subnet boolean
  - offer-time number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string-not-all-spaces
      - duration number
      - empty
      - hex-string hex-string
      - ipv4-address ipv4-address
      - netbios-node-type keyword
  - subnet ipv4-unicast-prefix
    - address-range ipv4-unicast-address end ipv4-unicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - failover-control-type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
    - exclude-addresses ipv4-unicast-address end ipv4-unicast-address
    - maximum-declined number
    - minimum-free
      - absolute number
      - event-when-depleted boolean
      - percent number
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string-not-all-spaces
        - duration number

```

configure service vprn dhcp-server dhcpv4 pool subnet options option empty

```

    - empty
    - hex-string hex-string
    - ipv4-address ipv4-address
    - netbios-node-type keyword
  - pool-selection
    - use-gi-address
      - scope keyword
    - use-pool-from-client
      - delimiter string-not-all-spaces
  - user-db reference
  - user-identification keyword
- dhcpv6 named-item
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-provisioned boolean
  - defaults
    - apply-groups reference
    - apply-groups-exclude reference
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string-not-all-spaces
        - domain-string string
        - duration number
        - empty
        - hex-string hex-string
        - ipv6-address ipv6-address
      - preferred-lifetime number
      - rebind-time number
      - renew-time number
      - valid-lifetime number
  - description description
  - failover
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ignore-mclt-on-takeover boolean
    - maximum-client-lead-time number
    - partner-down-delay number
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag named-item
    - startup-wait-time number
  - ignore-rapid-commit boolean
  - interface-id-mapping boolean
  - lease-hold
    - additional-scenarios
      - fwa-address-assignment boolean
      - internal-lease-ipsec boolean
      - solicited-release boolean
    - time number
  - lease-query boolean
  - pool named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - delegated-prefix
      - length number
      - maximum number
      - minimum number
    - description description
    - exclude-prefix ipv6-prefix

```

configure service vprn dhcp-server dhcpv6 pool failover

- **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *named-item*
 - **startup-wait-time** *number*
- **options**
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string-not-all-spaces*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *hex-string*
 - **ipv6-address** *ipv6-address*
- **prefix** *ipv6-prefix*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **failover-control-type** *keyword*
 - **options**
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string-not-all-spaces*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *hex-string*
 - **ipv6-address** *ipv6-address*
 - **preferred-lifetime** *number*
 - **prefix-length-threshold** *number*
 - **absolute** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **event-when-depleted** *boolean*
 - **percent** *number*
 - **prefix-type**
 - **pd** *boolean*
 - **wan-host** *boolean*
 - **rebind-time** *number*
 - **renew-time** *number*
 - **valid-lifetime** *number*
- **prefix-length-threshold** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **event-when-depleted** *boolean*
 - **minimum-free-percent** *number*
- **pool-selection**
 - **use-link-address**
 - **scope** *keyword*
 - **use-pool-from-client**
 - **delimiter** *string-not-all-spaces*
- **server-id**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duid-enterprise**

configure service vpn dhcp-server dhcpv6 server-id duid-enterprise ascii-string

```

    - ascii-string string-not-all-spaces
    - hex-string hex-string
    - duid-link-local
  - user-db reference
  - user-identification keyword
- dns
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-domain fully-qualified-domain-name
  - ipv4-source-address (keyword | ipv4-unicast-address)
  - ipv6-source-address (keyword | ipv6-unicast-address)
  - server (ipv4-address-no-zone | ipv6-address-no-zone)
- ecmp number
- ecmp-unequal-cost boolean
- entropy-label boolean
- evpn-neighbor-synchronization
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - evi-route-target evi-route-target
  - retention-timer number
  - route-distinguisher vpn-route-distinguisher
  - route-tag number
- export-inactive-bgp boolean
- export-inactive-bgp-enhanced boolean
- fib-priority keyword
- grt-leaking
  - allow-local-management boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - export-grt
    - policy-name (policy-expr-string | string)
  - export-limit number
  - export-v6-limit number
  - grt-lookup boolean
  - import-grt
    - policy-name (policy-expr-string | string)
- hash-label boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group-if-query-source-address ipv4-unicast-address
  - interface interface-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - redundant-mcast boolean
    - router-alert-check boolean
    - ssm-translate
      - group-range start ipv4-multicast-address end ipv4-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv4-unicast-address
    - static
      - group ipv4-multicast-address

```

configure service vpn igmp interface static group apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - source ipv4-unicast-address
    - starg
  - group-range start ipv4-multicast-address end ipv4-multicast-
address step ipv4-address
    - apply-groups reference
    - apply-groups-exclude reference
    - source ipv4-unicast-address
    - starg
  - subnet-check boolean
  - version keyword
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - ssm-translate
  - group-range start ipv4-multicast-address end ipv4-multicast-address
    - apply-groups reference
    - apply-groups-exclude reference
    - source ipv4-unicast-address
- ignore-nh-metric boolean
- interface interface-name
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- autoconfigure
  - ipv4
    - dhcp-client
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - class-id
        - ascii-string string
        - hex-string hex-string
      - client-id
        - ascii-string string
        - hex-string hex-string
      - interface
      - mac
      - lease-time (number | keyword)
      - request-options
        - dns-server boolean
        - router boolean
        - static-route boolean
  - description very-long-description
- dynamic-tunnel-redundant-nexthop ipv4-unicast-address
- hold-time
  - ipv4
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
  - ipv6
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
- if-attribute
  - admin-group reference
  - srlg-group reference
- ingress

```

configure service vpn interface ip-mtu

```

- ip-mtu number
- ip-tunnel-interface boolean
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip ipv4-unicast-address
      - interface interface-name
      - service-name service-name
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description description
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - auto-establish-sustain boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
      - id
        - fqdn fully-qualified-domain-name
        - ipv4 ipv4-unicast-address
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - ppk
        - id reference
        - list reference
      - pre-shared-key encrypted-leaf
      - reverse-route-injection
        - metric number
        - preference number
    - manual
      - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key hex-string
      - encryption-key hex-string
      - ipsec-transform reference
      - spi number

```

configure service vpn interface ipsec ipsec-tunnel local-gateway-address-override

```

zone)
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
    - max-history-key-records
      - esp number
      - ike number
    - pmtu-discovery-aging number
    - private-sap number
    - private-service service-name
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - replay-window number
    - security-policy
      - id number
      - strict-match boolean
    - ipv6-exception reference
    - public-sap number
    - tunnel-group reference
  - ipv4
    - addresses
      - address ipv4-unicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
    - allow-directed-broadcasts boolean
    - bfd
      - admin-state keyword
      - echo-receive number
      - multiplier number
      - receive number
      - transmit-interval number
      - type keyword
    - dhcp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - gi-address ipv4-unicast-address
      - lease-populate
      - max-leases number
      - option-82
      - action keyword
      - circuit-id
        - ascii-tuple
        - ifindex
        - none
        - sap-id
        - vlan-ascii-tuple
      - remote-id
        - ascii-string string-not-all-spaces
        - mac
        - none
      - vendor-specific-option
        - client-mac-address boolean
        - pool-name boolean
        - sap-id boolean
        - service-id boolean
        - string string-not-all-spaces
        - system-id boolean
    - proxy-server
      - admin-state keyword
      - emulated-server ipv4-unicast-address

```

configure service vprn interface ipv4 dhcp proxy-server lease-time

```

- lease-time
  - radius-override boolean
  - value number
- relay-plain-bootp boolean
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override ipv4-unicast-address
- server ipv4-unicast-address
- src-ip-addr keyword
- trusted boolean
- use-arp boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachable
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address ipv4-unicast-address
- local-dhcp-server reference
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - cpm-nat-policy reference
  - cpm-spf-nat-policy reference
- neighbor-discovery
  - host-route
    - populate keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
  - learn-unsolicited boolean
- limit
  - log-only boolean
  - max-entries number
  - threshold number
- local-proxy-arp boolean
- populate boolean
- proactive-refresh boolean
- proxy-arp-policy reference
- remote-proxy-arp boolean
- retry-timer number
- static-neighbor ipv4-address
  - apply-groups reference
  - apply-groups-exclude reference
  - mac-address mac-address
- static-neighbor-unnumbered
  - mac-address mac-address
- timeout number
- primary
  - address ipv4-unicast-address
  - apply-groups reference
  - apply-groups-exclude reference

```


configure service vprn interface ipv4 primary broadcast

- **broadcast** keyword
- **prefix-length** number
- **tag** (number | keyword)
- **secondary** ipv4-unicast-address
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **broadcast** keyword
 - **igp-inhibit** boolean
 - **prefix-length** number
 - **tag** (number | keyword)
- **tcp-mss** number
- **unnumbered**
 - **ip-address** ipv4-unicast-address
 - **ip-int-name** interface-name
- **urpf-check**
 - **ignore-default** boolean
 - **mode** keyword
- **vrrp** number
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **authentication-key** encrypted-leaf
 - **backup** ipv4-unicast-address
 - **bfd-liveness**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **dest-ip** ipv4-address
 - **interface-name** interface-name
 - **service-name** service-name
 - **init-delay** number
 - **mac** mac-unicast-address
 - **master-int-inherit** boolean
 - **message-interval** number
 - **monitor-oper-group** reference
 - **ntp-reply** boolean
 - **oper-group** reference
 - **owner** boolean
 - **passive** boolean
 - **ping-reply** boolean
 - **policy** reference
 - **preempt** boolean
 - **priority** number
 - **ssh-reply** boolean
 - **standby-forwarding** boolean
 - **telnet-reply** boolean
 - **traceroute-reply** boolean
- **ipv6**
 - **address** ipv6-address
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **duplicate-address-detection** boolean
 - **eui-64** boolean
 - **prefix-length** number
 - **primary-preference** number
 - **tag** (number | keyword)
 - **bfd**
 - **admin-state** keyword
 - **echo-receive** number
 - **multiplier** number
 - **receive** number
 - **transmit-interval** number
 - **type** keyword
 - **dhcp6**
 - **apply-groups** reference

configure service vprn interface ipv6 dhcp6 apply-groups-exclude

- **apply-groups-exclude** *reference*
- **relay**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **lease-populate**
 - **max-nbr-of-leases** *number*
 - **route-populate**
 - **na** *boolean*
 - **pd**
 - **exclude** *boolean*
 - **ta** *boolean*
- **option**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-id**
 - **ascii-tuple**
 - **if-index**
 - **sap-id**
 - **string** *string-not-all-spaces*
 - **remote-id** *boolean*
 - **server** *ipv6-address-with-zone*
 - **source-address** *ipv6-unicast-or-linklocal-address*
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **link-local-address**
 - **address** *ipv6-address*
 - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-unsolicited** *keyword*
- **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
- **local-proxy-nd** *boolean*
- **proactive-refresh** *keyword*

configure service vprn interface ipv6 neighbor-discovery proxy-nd-policy

- **proxy-nd-policy** *reference*
- **reachable-time** *number*
- **stale-time** *number*
- **static-neighbor** *ipv6-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *mac-address*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *ipv6-address*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *interface-name*
 - **service-name** *service-name*
 - **init-delay** *number*
 - **mac** *mac-unicast-address*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **load-balancing**
 - **ip-load-balancing** *keyword*
- **loopback** *boolean*
- **mac** *mac-unicast-address*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **ptp-hw-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **sap** *sap*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **collect-stats** *boolean*
 - **description** *long-description*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **agg-rate**
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**
 - **ip** *reference*

configure service vprn interface sap egress filter ipv6

```

- ipv6 reference
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- sap-egress
- overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- parent
- cir-weight number
- weight number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- port-redirect-group
- group-name reference
- instance number
- scheduler-policy
- overrides
- scheduler named-item
- apply-groups reference
- apply-groups-exclude reference
- parent
- cir-weight number
- weight number
- rate

```

configure service vprn interface sap egress qos scheduler-policy overrides scheduler rate cir

```

        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
- ingress
- filter
  - ip reference
  - ipv6 reference
- qos
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
          - apply-groups reference
          - apply-groups-exclude reference
          - mbs-contribution (number | keyword)
      - policy-name reference
  - sap-ingress
    - fp-redirect-group
      - group-name reference
      - instance number
    - overrides
      - policer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - mbs (number | keyword)
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - mbs (number | keyword)
      - parent
        - cir-weight number
        - weight number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - scheduler-policy
    - overrides
      - scheduler named-item
      - apply-groups reference

```

configure service vpn interface sap ingress qos scheduler-policy overrides scheduler apply-groups-exclude

- **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **policy-name** *reference*
- **ip-tunnel** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **clear-df-bit** *boolean*
 - **delivery-service** *service-name*
 - **description** *description*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **dscp** *keyword*
 - **encapsulated-ip-mtu** *number*
 - **gre-header**
 - **admin-state** *keyword*
 - **key**
 - **admin-state** *keyword*
 - **receive** *number*
 - **send** *number*
 - **icmp-generation**
 - **frag-required**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
 - **icmp6-generation**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **ip-mtu** *number*
 - **ipsec-transport-mode-profile** *reference*
 - **local-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **pmtu-discovery-aging** *number*
 - **private-tcp-mss-adjust** *number*
 - **propagate-pmtu-v4** *boolean*
 - **propagate-pmtu-v6** *boolean*
 - **public-tcp-mss-adjust** (*number* | *keyword*)
 - **reassembly** (*number* | *keyword*)
 - **remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **ipsec-gateway** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert**
 - **cert-profile** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **primary** *keyword*
 - **secondary** *keyword*
 - **trust-anchor-profile** *reference*
- **client-db**
 - **fallback** *boolean*
 - **name** *reference*
- **default-secure-service**
 - **interface** *interface-name*
 - **service-name** *service-name*
- **default-tunnel-template** *reference*
- **dhcp-address-assignment**

configure service vprn interface sap ipsec-gateway dhcp-address-assignment dhcpv4

```

- dhcpv4
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gi-address ipv4-unicast-address
  - send-release boolean
  - server
    - address ipv4-unicast-address
    - router-instance router-instance-base-vprn-loose
- dhcpv6
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - link-address ipv6-unicast-address
  - send-release boolean
  - server
    - address ipv6-unicast-address
    - router-instance router-instance-base-vprn-loose
- ike-policy reference
- local
  - address-assignment
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv4
      - dhcp-server named-item
      - pool named-item
      - router-instance router-instance-base-vprn-loose
      - secondary-pool named-item
    - ipv6
      - dhcp-server named-item
      - pool named-item
      - router-instance router-instance-base-vprn-loose
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - id
    - auto
    - fqdn fully-qualified-domain-name
    - ipv4 ipv4-unicast-address
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
- max-history-key-records
  - esp number
  - ike number
  - removed-tunnels number
- mixed-tunnel-mode
- pre-shared-key encrypted-leaf
- radius
  - accounting-policy reference
  - authentication-policy reference
- ts-list reference
- ipsec-tunnel named-item
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip ipv4-unicast-address
      - interface interface-name
      - service-name service-name
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description description
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - encapsulated-ip-mtu number

```

configure service vpn interface sap ipsec-tunnel icmp-generation

```

- icmp-generation
- frag-required
  - admin-state keyword
  - interval number
  - message-count number
- icmp6-generation
- packet-too-big
  - admin-state keyword
  - interval number
  - message-count number
- ip-mtu number
- key-exchange
- dynamic
  - auto-establish boolean
  - auto-establish-sustain boolean
  - cert
    - cert-profile reference
    - status-verify
      - default-result keyword
      - primary keyword
      - secondary keyword
    - trust-anchor-profile reference
  - id
    - fqdn fully-qualified-domain-name
    - ipv4 ipv4-unicast-address
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - ike-policy reference
  - ipsec-transform reference
  - ppk
    - id reference
    - list reference
  - pre-shared-key encrypted-leaf
  - reverse-route-injection
    - metric number
    - preference number
- manual
  - keys number direction keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key hex-string
  - encryption-key hex-string
  - ipsec-transform reference
  - spi number
- max-history-key-records
  - esp number
  - ike number
- pmtu-discovery-aging number
- private-tcp-mss-adjust number
- propagate-pmtu-v4 boolean
- propagate-pmtu-v6 boolean
- public-tcp-mss-adjust (number | keyword)
- replay-window number
- security-policy
  - id reference
  - strict-match boolean
- tunnel-endpoint
  - delivery-service service-name
  - local-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- lag
- multi-service-site reference
- spoke-sdp sdp-bind-id
- accounting-policy reference
- admin-state keyword

```


configure service vprn interface spoke-sdp apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- description description
- egress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - policy-name reference
      - port-redirect-group
        - group-name reference
        - instance number
    - vc-label number
- entropy-label
- hash-label
  - signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
        - policy-name reference
    - vc-label number
- vc-type keyword
- static-tunnel-redundant-nexthop ipv4-unicast-address
- tos-marking-state keyword
- tunnel boolean
- vas-if-type keyword
- vpls named-item-64
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - reclassify-using-qos reference
    - routed-override-filter
      - ip reference
      - ipv6 reference
  - evpn
    - arp
      - advertise keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - interface-less-routing
        - bgp-evpn-instance number
      - route-tag number
    - evpn-local-es
      - entry-type keyword
      - retention-timer number
    - flood-garp-and-unknown-req boolean
    - learn-dynamic boolean
    - nd
      - advertise keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - interface-less-routing
        - bgp-evpn-instance number
      - route-tag number
    - evpn-local-es
      - entry-type keyword

```

configure service vprn interface vpls evpn nd evpn-local-es retention-timer

```

    - retention-timer number
    - learn-dynamic boolean
- evpn-tunnel
  - allow-bfd boolean
  - ipv6-gateway-address keyword
  - supplementary-broadcast-domain boolean
- ingress
  - routed-override-filter
    - ip reference
    - ipv6 reference
- ip-mirror-interface interface-name
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description very-long-description
  - spoke-sdp sdp-bind-id
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - ingress
      - filter
        - ip reference
        - vc-label number
- ip-transport port
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - dscp-name keyword
  - filter-unknown-host boolean
  - local-host
    - ip-address ipv4-unicast-address
    - port-num number
    - protocol keyword
  - remote-host number
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - ip-address ipv4-unicast-address
    - port-num number
    - remote-host-name string
- tcp
  - inactivity-timeout number
  - max-retries number
  - retry-interval number
- ipsec
  - allow-reverse-route-override-type keyword
  - multi-chassis-shunt-interface reference
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - multi-chassis-shunting-profile named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - multi-chassis-shunt-interface reference
  - overlapping-reverse-route boolean
  - security-policy number
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vpn ipsec security-policy entry

- **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ip**
 - **address** *ipv4-prefix*
 - **any** *boolean*
 - **local-ipv6**
 - **address** *ipv6-prefix*
 - **any** *boolean*
 - **remote-ip**
 - **address** *ipv4-prefix*
 - **any** *boolean*
 - **remote-ipv6**
 - **address** *ipv6-prefix*
 - **any** *boolean*
- **ipv6**
 - **neighbor-discovery**
 - **reachable-time** *number*
 - **stale-time** *number*
 - **router-advertisement**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rdnss-lifetime** (*keyword* | *number*)
 - **server** *ipv6-address*
 - **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **current-hop-limit** *number*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **server** *ipv6-address*
 - **managed-configuration** *boolean*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **mtu** *number*
 - **nd-router-preference** *keyword*
 - **other-stateful-configuration** *boolean*
 - **prefix** *ipv6-prefix*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*keyword* | *number*)
 - **valid-lifetime** (*keyword* | *number*)
 - **reachable-time** *number*
 - **retransmit-time** *number*
 - **router-lifetime** *number*
 - **use-virtual-mac** *boolean*
 - **isis** *number*
 - **additional-system-id** *system-id-no-default*
 - **admin-state** *keyword*
 - **advertise-passive-only** *boolean*
 - **advertise-router-capability** *keyword*
 - **all-l1isis** *mac-address*
 - **all-l2isis** *mac-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vpn isis area-address

- **area-address** *area-address*
- **authentication-check** *boolean*
- **authentication-key** *encrypted-leaf*
- **authentication-keychain** *reference*
- **authentication-type** *keyword*
- **csnp-authentication** *boolean*
- **csnp-on-p2p** *boolean*
- **default-route-tag** *number*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **fast-flooding**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **lsp-receiver**
 - **advertise-flooding-tlv** *boolean*
 - **burst-size** *number*
 - **lsp-per-psnp** *number*
 - **lsp-transmit-interval** *number*
 - **psnp-interval** *number*
 - **receive-window** *number*
 - **lsp-sender**
 - **enforce-burst-size** *boolean*
 - **enforce-receive-window** *boolean*
 - **local-defaults**
 - **burst-size** *number*
 - **lsp-per-psnp** *number*
 - **lsp-transmit-interval** *number*
 - **receive-window** *number*
- **graceful-restart**
 - **helper-mode** *boolean*
- **hello-authentication** *boolean*
- **hello-padding** *keyword*
- **ignore-attached-bit** *boolean*
- **ignore-lsp-errors** *boolean*
- **ignore-narrow-metric** *boolean*
- **iid-tlv** *boolean*
- **import-policy** *reference*
- **interface** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **ipv4**
 - **include-bfd-tlv** *boolean*
 - **ipv6**
 - **include-bfd-tlv** *boolean*
 - **conditional-advertise-prefix** *reference*
 - **csnp-interval** *number*
 - **default-instance** *boolean*
 - **fast-flooding**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **lsp-receiver**
 - **admin-state** *keyword*
 - **advertise-flooding-tlv** *boolean*
 - **burst-size** *number*
 - **lsp-per-psnp** *number*
 - **lsp-transmit-interval** *number*
 - **psnp-interval** *number*
 - **receive-window** *number*
 - **lsp-sender**
 - **admin-state** *keyword*

configure service vpn isis interface fast-flooding lsp-sender enforce-burst-size

- **enforce-burst-size** *boolean*
- **enforce-receive-window** *boolean*
- **local-defaults**
 - **burst-size** *number*
 - **lsp-per-psnp** *number*
 - **lsp-transmit-interval** *number*
 - **receive-window** *number*
- **hello-authentication** *boolean*
- **hello-authentication-key** *encrypted-leaf*
- **hello-authentication-keychain** *reference*
- **hello-authentication-type** *keyword*
- **hello-padding** *keyword*
- **interface-type** *keyword*
- **ipv4-multicast** *boolean*
- **ipv6-unicast** *boolean*
- **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hello-authentication-key** *encrypted-leaf*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **hello-padding** *keyword*
 - **ipv4-multicast-metric** *number*
 - **ipv6-unicast-metric** *number*
 - **metric** *number*
 - **passive** *boolean*
 - **priority** *number*
 - **sd-offset** *number*
 - **sf-offset** *number*
 - **level-capability** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsp-pacing-interval** *number*
- **mesh-group**
 - **blocked**
 - **value** *number*
- **passive** *boolean*
- **retransmit-interval** *number*
- **tag** *number*
- **ipv4-multicast-routing** *keyword*
- **ipv4-routing** *boolean*
- **ipv6-routing** *keyword*
- **level** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **csnp-authentication** *boolean*
 - **default-ipv4-multicast-metric** *number*
 - **default-ipv6-unicast-metric** *number*
 - **default-metric** *number*
 - **external-preference** *number*
 - **hello-authentication** *boolean*
 - **hello-padding** *keyword*
 - **loopfree-alternate-exclude** *boolean*
 - **lsp-mtu-size** *number*
 - **preference** *number*

configure service vprn isis level psnp-authentication

- **psnp-authentication** *boolean*
- **wide-metrics-only** *boolean*
- **level-capability** *keyword*
- **link-group** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *very-long-description*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-multicast-metric-offset** *number*
 - **ipv4-unicast-metric-offset** *number*
 - **ipv6-unicast-metric-offset** *number*
 - **member** *reference*
 - **oper-members** *number*
 - **revert-members** *number*
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** *reference*
- **lsp-lifetime** *number*
- **lsp-minimum-remaining-lifetime** *number*
- **lsp-mtu-size** *number*
- **lsp-refresh**
 - **half-lifetime** *boolean*
 - **interval** *number*
- **multi-part-tlv**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **neighbor** *boolean*
 - **srlg** *boolean*
- **multi-topology**
 - **ipv4-multicast** *boolean*
 - **ipv6-unicast** *boolean*
- **multicast-import**
 - **ipv4** *boolean*
- **overload**
 - **max-metric** *boolean*
- **overload-export-external** *boolean*
- **overload-export-interlevel** *boolean*
- **overload-fib-error-notify-only**
 - **retry** *number*
- **overload-on-boot**
 - **max-metric** *boolean*
 - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
 - **limit** *number*
 - **log-only** *boolean*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **psnp-authentication** *boolean*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
 - **tag** *number*
- **router-id** *router-id*
- **standard-multi-instance** *boolean*
- **strict-adjacency-check** *boolean*
- **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level-capability** *keyword*

configure service vpn isis summary-address route-tag

- **route-tag** *number*
- **suppress-attached-bit** *boolean*
- **system-id** *system-id*
- **timers**
 - **lsp-wait**
 - **lsp-initial-wait** *number*
 - **lsp-max-wait** *number*
 - **lsp-second-wait** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **label-mode** *keyword*
- **local-routes-domain-id** *domain-id*
- **log**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter** *log-filter-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **description** *description*
 - **named-entry** *log-filter-entry-name*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **match**
 - **application**
 - **eq** *keyword*
 - **neq** *keyword*
 - **event**
 - **eq** *number*
 - **gt** *number*
 - **gte** *number*
 - **lt** *number*
 - **lte** *number*
 - **neq** *number*
 - **message**
 - **eq** *string*
 - **neq** *string*
 - **regexp** *boolean*
 - **severity**
 - **eq** *keyword*
 - **gt** *keyword*
 - **gte** *keyword*
 - **lt** *keyword*
 - **lte** *keyword*
 - **neq** *keyword*
 - **subject**
 - **eq** *named-item*
 - **neq** *named-item*
 - **regexp** *boolean*
- **log-id** *li-log-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **destination**
 - **netconf**
 - **max-entries** *number*

configure service vprn log log-id destination snmp

```

    - snmp
      - max-entries number
      - syslog reference
    - filter reference
    - netconf-stream named-item
    - source
      - change boolean
      - debug boolean
      - main boolean
      - security boolean
    - time-format keyword
    - snmp-trap-group svc-vprn-snmp-trap-group-name
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - trap-target string
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - notify-community string
      - port number
      - replay boolean
      - security-level keyword
      - version keyword
    - syslog log-vprn-syslog-name
    - address (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name)
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - facility keyword
      - hostname
        - use-system-name
        - use-vprn-name
        - value named-item-255
      - log-prefix (keyword | string)
      - port number
      - protocol-version keyword
      - severity keyword
      - timestamp-format keyword
      - tls-client-profile reference
    - management
      - allow-ftp boolean
      - allow-grpc boolean
      - allow-netconf boolean
      - allow-ssh boolean
      - allow-telnet boolean
      - allow-telnet6 boolean
      - apply-groups reference
      - apply-groups-exclude reference
    - maximum-ipv4-routes
      - log-only boolean
      - threshold number
      - value number
    - maximum-ipv6-routes
      - log-only boolean
      - threshold number
      - value number
    - mc-maximum-routes
      - log-only boolean
      - threshold number
      - value number
    - mld

```


configure service vprn mld admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- group-if-query-source-address ipv6-unicast-or-linklocal-address
- interface interface-name
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - router-alert-check boolean
  - ssm-translate
    - group-range start ipv6-multicast-address end ipv6-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv6-unicast-address
    - static
      - group ipv6-multicast-address
        - apply-groups reference
        - apply-groups-exclude reference
        - source ipv6-unicast-address
        - starg
      - group-range start ipv6-multicast-address end ipv6-multicast-
address step ipv6-address
        - apply-groups reference
        - apply-groups-exclude reference
        - source ipv6-unicast-address
        - starg
    - version keyword
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - ssm-translate
    - group-range start ipv6-multicast-address end ipv6-multicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - source ipv6-unicast-address
- mss-adjust
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-group number
  - segment-size number
- mvpn
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-discovery
    - source-address ipv4-address
    - type keyword
  - c-mcast-signaling keyword
  - intersite-shared
    - admin-state keyword
    - kat-type5-advertisement-withdraw boolean
    - persistent-type5-advertisement boolean
  - mdt-type keyword
  - provider-tunnel
    - inclusive
      - bsr keyword
      - pim

```

configure service vprn mvpn provider-tunnel inclusive pim admin-state

```

    - admin-state keyword
    - group-address ipv4-multicast-address
    - hello-interval number
    - hello-multiplier number
    - improved-assert boolean
    - mode keyword
    - three-way-hello boolean
    - tracking-support boolean
  - suppress-ipmsi boolean
  - wildcard-spmsi boolean
- selective
  - asm-mdt boolean
  - auto-discovery boolean
  - data-delay-interval number
  - data-threshold
    - group-prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - pe-threshold-add number
      - pe-threshold-delete number
      - threshold number
  - join-tlv-packing boolean
  - multistream-spmsi number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group-prefix (ipv4-prefix | ipv6-prefix) source-prefix (ipv4-prefix |
ipv6-prefix)
    - lsp-template reference
    - pim
      - group-address ipv4-multicast-address
      - mode keyword
  - pim
    - group-prefix ipv4-multicast-prefix
    - mode keyword
- redundant-source-list
- source-prefix (ipv4-prefix | ipv6-prefix)
- rpf-select
  - core-mvpn reference
    - apply-groups reference
    - apply-groups-exclude reference
    - group-prefix ipv4-multicast-prefix
      - apply-groups reference
      - apply-groups-exclude reference
    - starg boolean
- umh-pe-backup
  - umh-pe ipv4-unicast-address
    - apply-groups reference
    - apply-groups-exclude reference
    - standby ipv4-unicast-address
- umh-selection keyword
- vrf-export
  - policy (policy-expr-string | string)
  - unicast boolean
- vrf-import
  - policy (policy-expr-string | string)
  - unicast boolean
- vrf-target
  - community route-target
  - export
    - community route-target
    - unicast boolean
  - import
    - community route-target

```

configure service vprn mvprn vrf-target import unicast

```

- unicast boolean
- unicast boolean
- nat
- apply-groups reference
- apply-groups-exclude reference
- inside
- large-scale
- nat-policy reference
- nat44
- destination-prefix ipv4-unicast-prefix
- apply-groups reference
- apply-groups-exclude reference
- nat-policy reference
- deterministic
- address-map ipv4-address to ipv4-address nat-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- outside-range ipv4-address
- prefix-map ipv4-unicast-prefix nat-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- map ipv4-address to ipv4-address
- apply-groups reference
- apply-groups-exclude reference
- first-outside-address ipv4-address
- max-subscriber-limit number
- outside
- filters
- downstream
- ipv4 reference
- upstream
- ipv4 reference
- mtu number
- pool named-item
- address-range ipv4-unicast-address end ipv4-unicast-address
- apply-groups reference
- apply-groups-exclude reference
- description description
- drain boolean
- admin-state keyword
- applications
- agnostic boolean
- use-interface-ip boolean
- apply-groups reference
- apply-groups-exclude reference
- description description
- icmp-echo-reply boolean
- large-scale
- subscriber-limit number
- use-interface-ip
- cpm-reserved-ports number
- use-well-known-ports boolean
- mode keyword
- nat-group reference
- port-forwarding
- dynamic-block-reservation boolean
- range-end number
- port-reservation
- port-blocks number
- ports number
- type keyword
- watermarks

```

configure service vpn nat outside pool watermarks high

- **high** *number*
 - **low** *number*
- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **fp-redirect-group** *reference*
 - **instance** *number*
 - **network-policy** *reference*
 - **urpf-check** *boolean*
 - **network-interface** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *very-long-description*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **ip-mtu** *number*
 - **ipv4**
 - **allow-directed-broadcasts** *boolean*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **ttl-expired**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **neighbor-discovery**
 - **retry-timer** *number*
 - **static-neighbor** *ipv4-address*
 - **apply-groups** *reference*

configure service vprn network-interface ipv4 neighbor-discovery static-neighbor apply-groups-exclude

```

    - apply-groups-exclude reference
    - mac-address mac-address
    - timeout number
  - primary
    - address ipv4-unicast-address
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast keyword
    - prefix-length number
  - secondary ipv4-unicast-address
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast keyword
    - igp-inhibit boolean
    - prefix-length number
  - tcp-mss number
  - urpf-check
    - ignore-default boolean
    - mode keyword
  - lag
  - load-balancing
    - ip-load-balancing keyword
    - lsr-load-balancing keyword
  - loopback
  - mac mac-unicast-address
  - port port-and-encap
  - qos
    - apply-groups reference
    - apply-groups-exclude reference
    - egress-instance number
    - egress-port-redirect-group reference
    - ingress-fp-redirect-group reference
    - ingress-instance number
    - network-policy reference
  - tos-marking-state keyword
  - ntp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticate boolean
    - authentication-check boolean
    - authentication-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - key encrypted-leaf
    - type keyword
    - authentication-keychain reference
  - broadcast reference
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-keychain reference
    - key-id reference
    - ttl number
    - version number
  - ospf number
    - admin-state keyword
    - advertise-router-capability keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - area ipv4-address
    - advertise-ne-profile reference
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vprn ospf area area-range

- **area-range** *ipv4-unicast-prefix*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **blackhole-aggregate** *boolean*
- **export-policy** *reference*
- **import-policy** *reference*
- **interface** *interface-name*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **advertise-subnet** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **strict** *boolean*
 - **strict-mode-holddown** *number*
 - **conditional-advertise-prefix** *reference*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *encrypted-leaf*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** *ipv4-unicast-address*
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*
 - **rib-priority** *keyword*
 - **transit-delay** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
 - **area-range** *ipv4-unicast-prefix*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*
 - **type-nssa** *boolean*
 - **redistribute-external** *boolean*
 - **summaries** *boolean*
- **sham-link** *interface-name ip-address ipv4-unicast-address*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **message-digest-key** *number*

configure service vpn ospf area sham-link message-digest-key apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **md5** *encrypted-leaf*
- **metric** *number*
- **retransmit-interval** *number*
- **transit-delay** *number*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *ipv4-address transit-area reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *encrypted-leaf*
 - **retransmit-interval** *number*
 - **transit-delay** *number*
- **compatible-rfc1583** *boolean*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
 - **interval** *number*
 - **limit** *number*
- **external-preference** *number*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **helper-resync-timeout** *number*
- **protocol**
 - **lls-restart-signaling** *boolean*
 - **standard** *boolean*
- **strict-lsa-checking** *boolean*
- **ignore-dn-bit** *boolean*
- **import-policy** *reference*
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** *reference*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
- **router-id** *router-id*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **super-backbone** *boolean*

configure service vpn ospf suppress-dn-bit

- **suppress-dn-bit** *boolean*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **vpn-domain**
 - **id** *system-id*
 - **type** *keyword*
- **vpn-tag** *number*
- **ospf3** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area** *ipv4-address*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole-aggregate** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **interface** *interface-name*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **inbound** *reference*
 - **outbound** *reference*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **strict** *boolean*
 - **strict-mode-holddown** *number*
 - **conditional-advertise-prefix** *reference*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*

configure service vprn ospf3 area interface rib-priority

- **rib-priority** keyword
- **transit-delay** number
- **key-rollover-interval** number
- **loopfree-alternate-exclude** boolean
- **nssa**
 - **area-range** (ipv4-prefix | ipv6-prefix)
 - **advertise** boolean
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **originate-default-route**
 - **adjacency-check** boolean
 - **type-nssa** boolean
 - **redistribute-external** boolean
 - **summaries** boolean
- **stub**
 - **default-metric** number
 - **summaries** boolean
- **virtual-link** ipv4-address **transit-area** reference
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **authentication**
 - **inbound** reference
 - **outbound** reference
 - **dead-interval** number
 - **hello-interval** number
 - **retransmit-interval** number
 - **transit-delay** number
- **export-limit**
 - **log-percent** number
 - **number** number
- **export-policy** reference
- **external-db-overflow**
 - **interval** number
 - **limit** number
- **external-preference** number
- **graceful-restart**
 - **helper-mode** boolean
 - **strict-lsa-checking** boolean
- **ignore-dn-bit** boolean
- **import-policy** reference
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** reference
- **multicast-import** boolean
- **overload** boolean
- **overload-include-ext-1** boolean
- **overload-include-ext-2** boolean
- **overload-include-stub** boolean
- **overload-on-boot**
 - **timeout** number
- **preference** number
- **reference-bandwidth** number
- **rib-priority**
 - **high**
 - **prefix-list** reference
- **router-id** router-id
- **rtr-adv-lsa-limit**
 - **log-only** boolean
 - **max-lsa-count** number
 - **overload-timeout** (number | keyword)
 - **warning-threshold** number
- **suppress-dn-bit** boolean
- **timers**

configure service vprn ospf3 timers incremental-spf-wait

```

- incremental-spf-wait number
- lsa-accumulate number
- lsa-arrival number
- lsa-generate
- lsa-initial-wait number
- lsa-second-wait number
- max-lsa-wait number
- redistribute-delay number
- spf-wait
- spf-initial-wait number
- spf-max-wait number
- spf-second-wait number
- unicast-import boolean
- pim
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- apply-to keyword
- bgp-nh-override boolean
- import
- join-policy reference
- register-policy reference
- interface interface-name
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- assert-period number
- bfd-liveness
- ipv4 boolean
- ipv6 boolean
- bsm-check-rtr-alert boolean
- hello-interval number
- hello-multiplier number
- improved-assert boolean
- instant-prune-echo boolean
- ipv4
- apply-groups reference
- apply-groups-exclude reference
- monitor-oper-group
- name reference
- operation keyword
- priority-delta number
- multicast boolean
- ipv6
- apply-groups reference
- apply-groups-exclude reference
- monitor-oper-group
- name reference
- operation keyword
- priority-delta number
- multicast boolean
- max-groups number
- multicast-senders keyword
- priority number
- sticky-dr
- priority number
- three-way-hello boolean
- tracking-support boolean
- ipv4
- admin-state keyword
- rpf-table keyword
- source-address
- register-message ipv4-unicast-address
- ssm-assert-compatible-mode boolean

```

configure service vprn pim ipv4 ssm-default-range

- **ssm-default-range** *boolean*
- **ipv6**
 - **admin-state** *keyword*
 - **rpf-table** *keyword*
 - **source-address**
 - **register-message** *ipv6-unicast-address*
 - **ssm-default-range** *boolean*
- **mtu-over-head** *number*
- **non-dr-attract-traffic** *boolean*
- **rp**
 - **bootstrap**
 - **export** *reference*
 - **import** *reference*
- **ipv4**
 - **anycast** *ipv4-unicast-address* **rp-set-peer** *ipv4-unicast-address*
 - **auto-rp-discovery** *boolean*
 - **bsr-candidate**
 - **address** *ipv4-unicast-address*
 - **admin-state** *keyword*
 - **hash-mask-len** *number*
 - **priority** *number*
 - **candidate** *boolean*
 - **mapping-agent** *boolean*
 - **rp-candidate**
 - **address** *ipv4-unicast-address*
 - **admin-state** *keyword*
 - **group-range** *ipv4-multicast-prefix*
 - **holdtime** *number*
 - **priority** *number*
 - **static**
 - **address** *ipv4-unicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-prefix** *ipv4-multicast-prefix*
 - **override** *boolean*
- **ipv6**
 - **anycast** *ipv6-unicast-address* **rp-set-peer** *ipv6-unicast-address*
 - **bsr-candidate**
 - **address** *ipv6-unicast-address*
 - **admin-state** *keyword*
 - **hash-mask-len** *number*
 - **priority** *number*
 - **embedded-rp**
 - **admin-state** *keyword*
 - **group-range** *ipv6-multicast-prefix*
 - **rp-candidate**
 - **address** *ipv6-unicast-address*
 - **admin-state** *keyword*
 - **group-range** *ipv6-multicast-prefix*
 - **holdtime** *number*
 - **priority** *number*
 - **static**
 - **address** *ipv6-unicast-address*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-prefix** *ipv6-multicast-prefix*
 - **override** *boolean*
- **spt-switchover** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **threshold** (*number* | *keyword*)
- **ssm-groups**
 - **group-range** (*ipv4-prefix* | *ipv6-prefix*)
- **radius**

configure service vpn radius apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- server named-item
  - accept-coa boolean
  - acct-port number
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - auth-port number
  - description description
  - insert-message-authenticator boolean
  - pending-requests-limit number
  - require-message-authenticator boolean
  - secret encrypted-leaf
  - tls-client-profile reference
- rip
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key encrypted-leaf
  - authentication-type keyword
  - bfd-liveness boolean
  - check-zero boolean
  - description description
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key encrypted-leaf
    - authentication-type keyword
    - bfd-liveness boolean
    - check-zero boolean
    - description description
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
  - neighbor interface-name
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key encrypted-leaf
    - authentication-type keyword
    - bfd-liveness boolean
    - check-zero boolean
    - description description
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - preference number
    - receive keyword
    - send keyword
    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number

```

configure service vpn rip group neighbor unicast-address

```

- unicast-address ipv4-unicast-address
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- propagate-metric boolean
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- ripng
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - check-zero boolean
  - description description
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean
    - description description
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean
    - description description
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - preference number
    - receive keyword
    - send keyword
    - split-horizon boolean
    - timers
      - flush number
      - timeout number

```

configure service vpn ripng group neighbor timers update

```

    - update number
    - unicast-address ipv6-unicast-address
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - router-id router-id
  - service-id number
  - sfm-overload
    - holdoff-time number
  - sgt-qos
  - dot1p
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dot1p (keyword | number)
  - dscp
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dscp (keyword | number)
    - dscp-map keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
  - snmp
    - access boolean
    - community encrypted-leaf
    - access-permissions keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - source-access-list reference
    - version keyword
  - source-address
    - ipv4 keyword
    - address ipv4-address
    - apply-groups reference
    - apply-groups-exclude reference
    - interface-name interface-name
    - ipv6 keyword
    - address ipv6-address
    - apply-groups reference
    - apply-groups-exclude reference
  - spoke-sdp sdp-bind-id
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
  - static-routes

```

configure service vprn static-routes apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **hold-down**
 - **initial** *number*
 - **max-value** *number*
 - **multiplier** *number*
- **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *community*
 - **description** *description-allow-all-white-spaces*
 - **generate-icmp** *boolean*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **router-instance** *string*
 - **tag** *number*
 - **community** *community*
 - **dhcp-next-hop** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *community*
 - **description** *description-allow-all-white-spaces*
 - **metric** *number*
 - **preference** *number*
 - **tag** *number*
 - **grt**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description-allow-all-white-spaces*
 - **metric** *number*
 - **preference** *number*
 - **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *community*
 - **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *description-allow-all-white-spaces*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **router-instance** *string*
 - **tag** *number*
 - **interface** *interface-name*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vpn static-routes route interface community

- **community** *community*
- **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
- **description** *description-allow-all-white-spaces*
- **load-balancing-weight** *number*
- **metric** *number*
- **preference** *number*
- **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **router-instance** *string*
- **tag** *number*
- **ipsec-tunnel** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *community*
 - **description** *description-allow-all-white-spaces*
 - **metric** *number*
 - **preference** *number*
 - **tag** *number*
- **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **community** *community*
 - **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *description-allow-all-white-spaces*
 - **load-balancing-weight** *number*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **router-instance** *string*
 - **tag** *number*
 - **validate-next-hop** *boolean*
- **tag** *number*
- **ttl-propagate**
 - **local** *keyword*
 - **transit** *keyword*
- **twamp-light**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **reflector**
 - **admin-state** *keyword*
 - **allow-ipv6-udp-checksum-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*

configure service vprn twamp-light reflector prefix apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *description*
- **type** *keyword*
- **udp-port** *number*
- **vprn-type** *keyword*
- **weighted-ecmp** *keyword*

4.27.1 service command descriptions

service

Synopsis	Enter the service context
Context	configure service
Tree	service
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpipe [[service-name](#)] *service-name*

Synopsis	Enter the cpipe list instance
Context	configure service cpipe <i>service-name</i>
Tree	cpipe
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[[service-name](#)] *service-name*

Synopsis	Administrative service name
Context	configure service cpipe <i>service-name</i>
Tree	cpipe
Description	<p>This command creates or edits a service instance.</p> <p>When a service is created, the customer keyword and <i>customer-id</i> must be specified and associates the service with a customer. The <i>customer-id</i> must already exist having been created using the customer command in the service context. When a service is created with a customer association, it is not possible to edit the customer association. The service must be deleted and re-created with a new customer association.</p> <p>When a service is created, the use of the customer<i>customer-id</i> is optional to navigate into the service configuration context. If attempting to edit a service with the incorrect <i>customer-id</i> results in an error.</p> <p>This command specifies the unique service identification number identifying the service in the service domain. This ID must be unique to this service and may not be used for any other service of any type. The service ID must be the same number used for every platform on which this service is defined.</p>
String length	1 to 64

String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service cpipe <i>service-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service cpipe <i>service-name</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>customer-name</i>
Notes	This element is mandatory.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Text description
Context	configure service cpipe <i>service-name</i> description <i>description</i>
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 26.3.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

endpoint *[name] named-item*

Synopsis Enter the **endpoint** list instance
Context **configure** *service cpipe service-name endpoint named-item*
Tree *endpoint*
Max. instances 2
Introduced 26.3.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[name] *named-item*

Synopsis Service endpoint name
Context **configure** *service cpipe service-name endpoint named-item*
Tree *endpoint*
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Notes This element is part of a list key.
Introduced 26.3.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

active-multipath *boolean*

Synopsis Active multi-path protection status
Context **configure** *service cpipe service-name endpoint named-item active-multipath boolean*
Tree *active-multipath*
Default false
Introduced 26.7.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

active-multipath-timeout *number*

Synopsis	Active Multipath timeout
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>endpoint</i> <i>named-item</i> active-multipath-timeout <i>number</i>
Tree	active-multipath-timeout
Range	1 to 60
Units	seconds
Introduced	26.7.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Text description
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>endpoint</i> <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hold-time-active *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>endpoint</i> <i>named-item</i> hold-time-active <i>number</i>
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>endpoint</i> <i>named-item</i> revert-time (<i>number</i> <i>keyword</i>)

Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

standby-signaling *keyword*

Synopsis	Status of whether PW standby bit is sent to T-LDP peer
Context	configure service cpipe <i>service-name</i> endpoint <i>named-item</i> standby-signaling <i>keyword</i>
Tree	standby-signaling
Description	This command configures whether the pseudowire standby bit (value 0x00000020) is sent to the T-LDP peer for each spoke-SDP of the endpoint that is selected as a standby. This command is mutually exclusive with the vc-switching command.
Options	master, slave
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

network-latency-measurement *boolean*

Synopsis	Enable/disable network latency measurement
Context	configure service cpipe <i>service-name</i> network-latency-measurement <i>boolean</i>
Tree	network-latency-measurement
Default	false
Introduced	26.7.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	configure service cpipe <i>service-name</i> sap <i>sap</i>
Tree	sap

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[sap-id] sap

Synopsis	SAP ID
Context	configure service cpipe <i>service-name</i> sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service cpipe <i>service-name</i> sap <i>sap</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service cpipe <i>service-name</i> sap <i>sap</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

cem

Synopsis	Enter the cem context
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Context	configure service cpipe <i>service-name</i> sap sap cem
Tree	cem
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

asym-delay-control

Synopsis	Enable the asym-delay-control context
Context	configure service cpipe <i>service-name</i> sap sap cem asym-delay-control
Tree	asym-delay-control
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

min-repeat *number*

Synopsis	Interval at which the ADC function will repeat after the service is up
Context	configure service cpipe <i>service-name</i> sap sap cem asym-delay-control min-repeat <i>number</i>
Tree	min-repeat
Range	0 to 1440
Units	minutes
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

samples *number*

Synopsis	Sample size in thousands
Context	configure service cpipe <i>service-name</i> sap sap cem asym-delay-control samples <i>number</i>
Tree	samples
Range	1 2 4 8 16 32
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

threshold-repeat *number*

Synopsis	Threshold to determine if an octet correction is made after an ADC repeat or on-demand ADC analysis in 125 microseconds increments
Context	configure service cpipe <i>service-name</i> sap sap cem asym-delay-control threshold-repeat <i>number</i>
Tree	threshold-repeat
Range	125 to 4000
Units	microseconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

packet

Synopsis	Enter the packet context
Context	configure service cpipe <i>service-name</i> sap sap cem packet
Tree	packet
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

jitter-buffer *number*

Synopsis	Jitter buffer size
Context	configure service cpipe <i>service-name</i> sap sap cem packet jitter-buffer <i>number</i>
Tree	jitter-buffer
Range	1 to 250
Units	milliseconds
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

payload-size *number*

Synopsis	Size of payload packets transmitted to PSN by CEM SAP
Context	configure service cpipe <i>service-name</i> sap sap cem packet payload-size <i>number</i>
Tree	payload-size
Range	2 to 1514

Units	bytes
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

report-alarm

Synopsis	Enter the report-alarm context
Context	configure service cpipe service-name sap sap cem report-alarm
Tree	report-alarm
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

buffer-overflow *boolean*

Synopsis	Report alarm for buffer overrun
Context	configure service cpipe service-name sap sap cem report-alarm buffer-overflow <i>boolean</i>
Tree	buffer-overflow
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

buffer-underrun *boolean*

Synopsis	Report alarm for buffer underrun
Context	configure service cpipe service-name sap sap cem report-alarm buffer-underrun <i>boolean</i>
Tree	buffer-underrun
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

malformed-packets *boolean*

Synopsis	Report alarm for malformed packets
Context	configure service cpipe service-name sap sap cem report-alarm malformed-packets <i>boolean</i>

Tree	malformed-packets
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

packet-loss *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	configure service cpipe service-name sap sap cem report-alarm packet-loss <i>boolean</i>
Tree	packet-loss
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-fault *boolean*

Synopsis	Report remote TDM interface is currently not in service
Context	configure service cpipe service-name sap sap cem report-alarm remote-fault <i>boolean</i>
Tree	remote-fault
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-packet-loss *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	configure service cpipe service-name sap sap cem report-alarm remote-packet-loss <i>boolean</i>
Tree	remote-packet-loss
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-rdi *boolean*

Synopsis	Report remote TDM interface is currently in RDI status
Context	configure service cpipe service-name sap sap cem report-alarm remote-rdi <i>boolean</i>
Tree	remote-rdi
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

stray-packets *boolean*

Synopsis	Report alarm for stray packets
Context	configure service cpipe service-name sap sap cem report-alarm stray-packets <i>boolean</i>
Tree	stray-packets
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

rtp-header *boolean*

Synopsis	Use RTP header for transmitted packets to the PSN
Context	configure service cpipe service-name sap sap cem rtp-header <i>boolean</i>
Tree	rtp-header
Description	When configured to true , the router uses the RTP header when packets are transmitted to the packet service network (PSN) by the CEM SAP. This mode must be enabled for differential-timed E1s.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service cpipe service-name sap sap collect-stats <i>boolean</i>
Tree	collect-stats

Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Text description
Context	configure service cpipe <i>service-name</i> sap sap description <i>long-description</i>
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

endpoint *reference*

Synopsis	Endpoint name
Context	configure service cpipe <i>service-name</i> sap sap endpoint <i>reference</i>
Tree	endpoint
Reference	configure service cpipe <i>service-name</i> endpoint <i>named-item</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ingress

Synopsis	Enter the ingress context
Context	configure service cpipe <i>service-name</i> sap sap ingress
Tree	ingress
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

qos

Synopsis	Enter the qos context
Context	configure service cpipe <i>service-name</i> sap sap ingress qos

Tree	qos
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service cpipe <i>service-name</i> sap sap ingress qos sap-ingress
Tree	sap-ingress
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

overrides

Synopsis	Enter the overrides context
Context	configure service cpipe <i>service-name</i> sap sap ingress qos sap-ingress overrides
Tree	overrides
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

policy-name *reference*

Synopsis	Policy ID
Context	configure service cpipe <i>service-name</i> sap sap ingress qos sap-ingress policy-name reference
Tree	policy-name
Reference	configure qos sap-ingress <i>qos-policy-name</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

lag

Synopsis	Enter the lag context
Context	configure service cpipe <i>service-name</i> sap sap lag
Tree	lag

Introduced26.3.R1

Platforms7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

SynopsisService ID

Context**configure** *service* *cpipe* *service-name* *service-id* *number*

Tree*service-id*

Range1 to 2147483647

Introduced26.3.R1

Platforms7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

service-mtu *number*

SynopsisMTU size

Context**configure** *service* *cpipe* *service-name* *service-mtu* *number*

Tree*service-mtu*

Range1 to 9194

Introduced26.3.R1

Platforms7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

spoke-sdp [*sdp-bind-id*] *sdp-bind-id*

SynopsisEnter the **spoke-sdp** list instance

Context**configure** *service* *cpipe* *service-name* *spoke-sdp* *sdp-bind-id*

Tree*spoke-sdp*

Introduced26.3.R1

Platforms7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[sdp-bind-id] *sdp-bind-id*

SynopsisSDP binding ID

Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i>
Tree	<i>spoke-sdp</i>
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> admin-state <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

bandwidth (*number* | *keyword*)

Synopsis	Bandwidth that is reserved for this SDP binding
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> bandwidth (<i>number</i> <i>keyword</i>)
Tree	<i>bandwidth</i>
Range	0 to 1000000000
Units	kilobps
Options	max
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

control-word *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	configure <i>service</i> <i>cpipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> control-word <i>boolean</i>

Tree	control-word
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Text description
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

egress

Synopsis	Enter the egress context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress
Tree	egress
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

qos

Synopsis	Enter the qos context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos
Tree	qos
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

network

Synopsis	Enter the network context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network

Tree	network
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

policy-name *reference*

Synopsis	Network policy ID
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

instance *number*

Synopsis	Queue-group instance ID
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Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group <i>instance</i> number
Tree	instance
Range	1 to 65535
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

endpoint

Synopsis	Enter the endpoint context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> endpoint
Tree	endpoint
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> endpoint <i>name</i> <i>reference</i>
Tree	name

Reference	configure service cpipe <i>service-name</i> endpoint <i>named-item</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

precedence (*number* | *keyword*)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> endpoint precedence (<i>number</i> <i>keyword</i>)
Tree	precedence
Range	1 to 4
Options	primary
Default	4
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ingress

Synopsis	Enter the ingress context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress
Tree	ingress
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

qos

Synopsis	Enter the qos context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos
Tree	qos
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

network

Synopsis	Enter the network context
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Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network
Tree	network
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

policy-name *reference*

Synopsis	Network policy ID
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

vc-label *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service cpipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

test *boolean*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	configure service cpipe <i>service-name</i> test <i>boolean</i>
Tree	test
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

vc-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit emulation service type signalled to the peer
Context	configure service cpipe <i>service-name</i> vc-type <i>keyword</i>
Tree	vc-type
Options	satop-e1, satop-t1, cesopsn, cesopsn-cas
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

customer [**customer-name**] *customer-name*

Synopsis	Enter the customer list instance
Context	configure service customer <i>customer-name</i>
Tree	customer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[customer-name] *customer-name*

Synopsis	Customer name for a service
Context	configure service customer <i>customer-name</i>
Tree	customer
String length	1 to 64
String format	'customer-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

contact *description*

Synopsis	Service customer contact information
Context	configure service customer <i>customer-name</i> contact <i>description</i>

Tree	contact
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

customer-id *number*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Customer ID
Context	configure service customer <i>customer-name</i> customer-id <i>number</i>
Tree	customer-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service customer <i>customer-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-service-site [[multi-service-site-name](#)] *named-item*

Synopsis	Enter the multi-service-site list instance
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i>
Tree	multi-service-site
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[multi-service-site-name] *named-item*

Synopsis	Customer site name
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i>
Tree	multi-service-site
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

assignment

Synopsis	Enter the assignment context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> assignment
Tree	assignment
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

card *number*

Synopsis	Multi-service-site assignment to the card slot
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> assignment card <i>number</i>
Tree	card
Range	1 to 20
Notes	The following elements are part of a choice: card , fpe , or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *port-named*

Synopsis	Multi-service-site assignment to the port
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> assignment port <i>port-named</i>

Tree	port
Notes	The following elements are part of a choice: card , fpe , or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress agg-rate
Tree	agg-rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
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Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress agg-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting for policers and queues
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Rate limit
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy *reference*

Synopsis	Policer control policy
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress policer-control-policy <i>reference</i>
Tree	policer-control-policy
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2

Platforms7705 SAR Gen 2

scheduler-policy

SynopsisEnter the **scheduler-policy** context

Context**configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [egress](#) [scheduler-policy](#)

Tree[scheduler-policy](#)

Introduced25.3.R2

Platforms7705 SAR Gen 2

overrides

SynopsisEnter the **overrides** context

Context**configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [egress](#) [scheduler-policy](#) [overrides](#)

Tree[overrides](#)

Introduced25.3.R2

Platforms7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

SynopsisEnter the **scheduler** list instance

Context**configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [egress](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *named-item*

Tree[scheduler](#)

Introduced25.3.R2

Platforms7705 SAR Gen 2

[[scheduler-name](#)] *named-item*

SynopsisScheduler name

Context**configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [egress](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *named-item*

Tree[scheduler](#)

DescriptionThis command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on),

the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context does not change.

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)

Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> egress scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy *reference*

Synopsis	Policer control policy
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress policer-control-policy <i>reference</i>
Tree	policer-control-policy
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

parent

Synopsis Enter the **parent** context
 Context **configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [ingress](#)
[scheduler-policy overrides scheduler](#) *named-item* [parent](#)
 Tree [parent](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
 Context **configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [ingress](#)
[scheduler-policy overrides scheduler](#) *named-item* [parent](#) [cir-weight](#) *number*
 Tree [cir-weight](#)
 Range 0 to 100
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
 Context **configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [ingress](#)
[scheduler-policy overrides scheduler](#) *named-item* [parent](#) [weight](#) *number*
 Tree [weight](#)
 Range 0 to 100
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

rate

Synopsis Enter the **rate** context
 Context **configure** [service](#) [customer](#) *customer-name* [multi-service-site](#) *named-item* [ingress](#)
[scheduler-policy overrides scheduler](#) *named-item* [rate](#)

Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i> ingress scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

phone *description*

Synopsis Service customer telephone number information

Context **configure** **service** **customer** *customer-name* **phone** *description*

Tree **phone**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

epipe [**service-name**] *service-name*

Synopsis Enter the **epipe** list instance

Context **configure** **service** **epipe** *service-name*

Tree **epipe**

Description Commands in this context configure an Epipe service instance.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[service-name] *service-name*

Synopsis Administrative service name

Context **configure** **service** **epipe** *service-name*

Tree **epipe**

Description This command creates or edits a service instance.

When a service is created, the **customer** keyword and *customer-id* must be specified and associates the service with a customer. The *customer-id* must already exist having been created using the customer command in the service context. When a service is created with a customer association, it is not possible to edit the customer association. The service must be deleted and re-created with a new customer association.

When a service is created, the use of the **customer***customer-id* is optional to navigate into the service configuration context. If attempting to edit a service with the incorrect *customer-id* results in an error.

This command specifies the unique service identification number identifying the service in the service domain. This ID must be unique to this service and may not be used for

any other service of any type. The service ID must be the same number used for every platform on which this service is defined.

String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service epipe <i>service-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp [[bgp-instance](#)] *number*

Synopsis	Enter the bgp list instance
Context	configure service epipe <i>service-name</i> bgp <i>number</i>
Tree	bgp
Description	Commands in this context configure the BGP related options that BGP uses for multihoming and BGP VPWS.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service epipe <i>service-name</i> bgp <i>number</i>
Tree	bgp
Range	1 to 2
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-service-mtu *number*

Synopsis	Advertised service MTU value
Context	configure service epipe <i>service-name</i> bgp <i>number</i> adv-service-mtu <i>number</i>
Tree	adv-service-mtu
Description	This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.
Range	0 to 9782
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-template-binding [[pw-template-name](#)] *reference*

Synopsis	Enter the pw-template-binding list instance
Context	configure service epipe <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i>
Tree	pw-template-binding
Max. instances	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pw-template-name] *reference*

Synopsis	Policy name
Context	configure service epipe <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i>
Tree	pw-template-binding
Reference	configure service pw-template <i>pw-template-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name associated with the BGP PW template
Context	configure service epipe <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i> endpoint <i>reference</i>
Tree	endpoint
Description	This command specifies the endpoint name associated with the BGP PW template. When an endpoint is associated to the PW template binding of a BGP VPWS service, EVPN MPLS can also be configured and associated to the same endpoint in the same Epipe service.
Reference	configure service epipe <i>service-name</i> endpoint <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-rt *route-target*

Synopsis	Import route-target communities
Context	configure service epipe <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i> import-rt <i>route-target</i>
Tree	import-rt
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-distinguisher (*keyword* | *vpn-route-distinguisher*)

Synopsis	RD component for NLRI for L2VPN and EVPN families
Context	configure service epipe <i>service-name</i> bgp <i>number</i> route-distinguisher (<i>keyword</i> <i>vpn-route-distinguisher</i>)
Tree	route-distinguisher

String format	'vpn-route-distinguisher' must be IP:comm or AS-number pair per RD rules
Options	auto-rd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target

Synopsis	Enter the route-target context
Context	configure service epipe <i>service-name</i> bgp <i>number</i> route-target
Tree	route-target
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export route-target

Synopsis	Extended community name for default import policy
Context	configure service epipe <i>service-name</i> bgp <i>number</i> route-target export route-target
Tree	export
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import route-target

Synopsis	Extended community name for default import policy
Context	configure service epipe <i>service-name</i> bgp <i>number</i> route-target import route-target
Tree	import
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vsi-export *reference*

Synopsis	VSI export policies
Context	configure service epipe <i>service-name</i> bgp <i>number</i> vsi-export <i>reference</i>
Tree	vsi-export
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vsi-import *reference*

Synopsis	VSI import policies
Context	configure service epipe <i>service-name</i> bgp <i>number</i> vsi-import <i>reference</i>
Tree	vsi-import
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn

Synopsis	Enable the bgp-evpn context
Context	configure service epipe <i>service-name</i> bgp-evpn
Tree	bgp-evpn
Description	Commands in this context configure the BGP-EVPN options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evi number

Synopsis	EVPN ID
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn</i> <i>evi</i> <i>number</i>
Tree	<i>evi</i>
Description	<p>This command configures an EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>The following options are supported:</p> <p>If this EVPN identifier is not specified, the value is zero and no route distinguisher or route target is automatically derived from it. If the specified EVPN identifier is lower than 65535 and no other route distinguisher or route target is configured in the service, the following applies:</p> <ul style="list-style-type: none"> the route distinguisher is derived from <system_ip>:evi the route target is derived from <autonomous-system>:evi <p>If the specified EVPN identifier is higher than 65535 and no other route distinguisher or route target is configured in the service, the following applies.</p> <ul style="list-style-type: none"> The route distinguisher cannot be automatically derived. An error is generated if enabling EVPN is attempted without a route distinguisher. A manual or an auto-rd route distinguisher must be configured. The route target can only be automatically derived if the evi-three-byte-auto-rt command is configured. If configured, the route target is automatically derived in accordance with the rules described in RFC8365.
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mtu-mismatch boolean

Synopsis	Ignore MTU mismatch
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn</i> <i>ignore-mtu-mismatch</i> <i>boolean</i>
Tree	<i>ignore-mtu-mismatch</i>
Description	<p>When configured to true, the system ignores the received Layer 2 MTU in the Layer 2 Attributes extended community of the AD per-EVI route for a peer.</p> <p>When configured to false, the system compares the local service MTU against the received Layer 2 MTU and if there is a mismatch, removes the EVPN destination to the peer.</p>
Default	false
Introduced	26.7.R1

Platforms 7705 SAR Gen 2

local-attachment-circuit [[name](#)] *named-item*

Synopsis	Enter the local-attachment-circuit list instance
Context	configure service epipe <i>service-name</i> bgp-evpn local-attachment-circuit <i>named-item</i>
Tree	local-attachment-circuit
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Attachment circuit name
Context	configure service epipe <i>service-name</i> bgp-evpn local-attachment-circuit <i>named-item</i>
Tree	local-attachment-circuit
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP instance ID
Context	configure service epipe <i>service-name</i> bgp-evpn local-attachment-circuit <i>named-item</i> bgp <i>number</i>
Tree	bgp
Range	1 to 2
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	configure service epipe <i>service-name</i> bgp-evpn local-attachment-circuit <i>named-item</i> endpoint <i>reference</i>
Tree	endpoint
Reference	configure service epipe <i>service-name</i> endpoint <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	configure service epipe <i>service-name</i> bgp-evpn local-attachment-circuit <i>named-item</i> eth-tag <i>number</i>
Tree	eth-tag
Description	<p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p>
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls [**bgp-instance**] *number*

Synopsis	Enter the mpls list instance
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i>
Tree	mpls

Description	Commands in this context configure the BGP-EVPN MPLS options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i>
Tree	mpls
Range	1 to 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-bind-tunnel

Synopsis	Enter the auto-bind-tunnel context
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure automatic binding of a VPRN service using tunnels to MP-BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel</i> allow-flex-algo-fallback <i>boolean</i>
Tree	<i>allow-flex-algo-fallback</i>
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum number of ECMP paths
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel</i> ecmp <i>number</i>
Tree	<i>ecmp</i>
Description	This command configures the number of paths that are allowed to reach a specified remote Ethernet tag that is associated to an EVPN destination.
Range	1 to 32
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-strict-tunnel-tagging *boolean*

Synopsis	Enable/disable enforcement of strict tunnel tagging
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	<i>enforce-strict-tunnel-tagging</i>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

enforce-untagged-route *keyword*

Synopsis	Untagged route type enforcement
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel enforce-untagged-route <i>keyword</i>
Tree	enforce-untagged-route
Description	This command configures the enforcement of BGP routes with no administrative tag policy applied by modifying the next-hop resolution behavior for autobind services.
Options	none – Untagged routes can bind to tagged or untagged LSPs untagged-tunnel – Untagged routes only bind to LSPs without an admin tag
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution <i>keyword</i>
Tree	resolution
Options	none , filter , any
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	<p>When configured to true, BGP searches the BGP LSP for the address of the BGP next hop.</p> <p>When configured to false, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	<p>When configured to true, BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.</p> <p>When configured to false, LDP tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	<p>When configured to true, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p>

	When configured to false , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>auto-bind-tunnel</i> <i>resolution-filter sr-isis</i> <i>boolean</i>
Tree	<i>sr-isis</i>
Description	<p>When configured to true, BGP uses an IS-IS tunnel type to resolve the BGP next hop.</p> <p>When the sr-isis command is enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none"> • Select the SR tunnel submitted by the IS-IS instance with the lowest tunnel table preference. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>auto-bind-tunnel</i> <i>resolution-filter sr-ospf</i> <i>boolean</i>
Tree	<i>sr-ospf</i>
Description	<p>When configured to true, BGP uses an OSPF tunnel type to resolve the BGP next hop.</p> <p>When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none"> • Select the SR tunnel submitted by the OSPF instance with the lowest tunnel table preference. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.

- If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID.

When configured to **false**, OSPF tunneling is not used for next-hop resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>auto-bind-tunnel</i> <i>resolution-filter</i> sr-ospf3 <i>boolean</i>
Tree	<i>sr-ospf3</i>
Description	<p>When configured to true, BGP uses an OSPF3 tunnel type to resolve the BGP next hop. When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none"> • Select the SR tunnel submitted by the OSPFv3 instance with the lowest tunnel table preference. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>auto-bind-tunnel</i> <i>resolution-filter</i> sr-policy <i>boolean</i>
Tree	<i>sr-policy</i>
Description	<p>When configured to true, this command enables the use of SR policies to resolve the next hop of BGP-EVPN service routes.</p> <p>This command configures BGP to search for an SR policy with:</p> <ul style="list-style-type: none"> • a non-null endpoint that matches the next hop of the service route, and

- a color value that matches the highest numbered color for the extended community attached to the service route

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	When configured to true , BGP uses an SR-TE tunnel type to resolve the BGP next hop. In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID. When configured to false , SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter udp <i>boolean</i>
Tree	udp
Description	When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to false , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Allow weighted load balancing
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Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>auto-bind-tunnel</i> <i>weighted-ecmp</i> <i>boolean</i>
Tree	<i>weighted-ecmp</i>
Description	<p>When configured to true, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.</p> <p>When configured to false, this command disables weighted ECMP for next-hop tunnel selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable support for control word
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>control-word</i> <i>boolean</i>
Tree	<i>control-word</i>
Description	When configured to true , the router enables the transmission and reception of the control word for all EVPN-MPLS destinations at the same time.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-route-tag *one-byte-value*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>default-route-tag</i> <i>one-byte-value</i>
Tree	<i>default-route-tag</i>

Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-id *domain-id*

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>domain-id</i> <i>domain-id</i>
Tree	<i>domain-id</i>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as <i>domain-id:isf_safi_type</i> in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> <p>The command is also supported in Epipe services with two instances. As in the case of multi-instance VPRN services, the configured domain ID in an Epipe instance is prepended to the AD per EVI route redistributed to the other instance.</p>
String format	'domain-id' must be global-field:local-field (uint32:uint16 range)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	configure <i>service epipe service-name bgp-evpn mpls number dynamic-egress-label-limit boolean</i>
Tree	<i>dynamic-egress-label-limit</i>
Description	<p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	configure <i>service epipe service-name bgp-evpn mpls number ecmp number</i>
Tree	<i>ecmp</i>
Range	1 to 32
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *boolean*

Synopsis	Enable use of entropy-labels
Context	configure <i>service epipe service-name bgp-evpn mpls number entropy-label boolean</i>
Tree	<i>entropy-label</i>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

evi-three-byte-auto-rt *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls number</i> <i>evi-three-byte-auto-rt boolean</i>
Tree	<i>evi-three-byte-auto-rt</i>
Description	<p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-vc-forwarding *keyword*

Synopsis	VC forwarding action
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>bgp-evpn mpls number</i> <i>force-vc-forwarding keyword</i>
Tree	<i>force-vc-forwarding</i>
Description	<p>This command configures the VLAN tag processing used on the service.</p> <p>The vlan option configures the router to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag, which is sent in the customer frame to the EVPN destinations.</p>

The **qinq-c-tag-c-tag** option configures the router to push two tags with the same value derived from the inner service-delimiting tag. At network ingress, two VLAN tags are extracted at most and the C-tag and S-tag p/de bits are propagated to the egress SAPs.

The **qinq-s-tag-c-tag** option configures the router to push two tags that are copied from the QinQ service-delimiting VLAN values and may be different. At network ingress, two VLAN tags are extracted at most and the p/de bits are propagated to the egress SAP service-delimiting S-tag and C-tag respectively.

Options	vlan – Push VLAN ID and 802.1p bits of service-delimiting qtag qinq-c-tag-c-tag – Push two tags identical to inner service-delimiting tag qinq-s-tag-c-tag – Push two tags based on QinQ service-delimiting values
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label *boolean*

Synopsis	Default profile when the CP-provided profile is unknown
Context	configure service epipe service-name bgp-evpn mpls number hash-label <i>boolean</i>
Tree	hash-label
Description	When configured to true , the router pushes the hash label. The hash label is never used for BUM packets. The hash-label push is based on the following: <ul style="list-style-type: none"> • If advertise-l2-attributes (in the configure service vpls bgp-evpn routes incl-mcast context) is set to false, the hash label is pushed to a unicast EVPN destination. • If advertise-l2-attributes is set to true, the F bit is set to 1 in the Layer 2 Attributes Extended Community of the EVPN IMET route for the service. The hash label is pushed only if the remote PE signaled support for hash label (received F bit is set to 1).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mh-mode *keyword*

Synopsis	Multihoming mode
Context	configure service epipe service-name bgp-evpn mpls number mh-mode <i>keyword</i>
Tree	mh-mode
Description	This command configures each BGP-EVPN instance in a multi-instance Epipe service to behave as network or access.

	You can only configure one network instance for the service. If the service has a provider tunnel enabled, it requires a network instance.
Options	access, network
Default	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group identifier
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-next-hop

Synopsis	Enter the route-next-hop context
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop system-ipv4
Tree	system-ipv4
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop system-ipv6
Tree	system-ipv6
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-tunnel-encap

Synopsis	Enter the send-tunnel-encap context
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> send-tunnel-encap
Tree	send-tunnel-encap
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mpls *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> send-tunnel-encap mpls-boolean
Tree	mpls
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-over-udp *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	configure service epipe <i>service-name</i> bgp-evpn mpls <i>number</i> send-tunnel-encap mpls-over-udp-boolean
Tree	mpls-over-udp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-attachment-circuit [[name](#)] *named-item*

Synopsis	Enter the remote-attachment-circuit list instance
Context	configure service epipe <i>service-name</i> bgp-evpn remote-attachment-circuit <i>named-item</i>
Tree	remote-attachment-circuit
Max. instances	2

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis Attachment circuit name
Context **configure** *service* *epipe* *service-name* *bgp-evpn* *remote-attachment-circuit* *named-item*
Tree *remote-attachment-circuit*
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

bgp *number*

 **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis BGP instance ID
Context **configure** *service* *epipe* *service-name* *bgp-evpn* *remote-attachment-circuit* *named-item* *bgp* *number*
Tree *bgp*
Range 1 to 2
Default 1
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

endpoint *reference*

 **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Endpoint name

Context	configure service epipe <i>service-name</i> bgp-evpn remote-attachment-circuit <i>named-item endpoint reference</i>
Tree	endpoint
Reference	configure service epipe <i>service-name</i> endpoint <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	configure service epipe <i>service-name</i> bgp-evpn remote-attachment-circuit <i>named-item eth-tag number</i>
Tree	eth-tag
Description	<p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p>
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-mh-site [*site-name*] *named-item*

Synopsis	Enter the bgp-mh-site list instance
Context	configure service epipe <i>service-name</i> bgp-mh-site <i>named-item</i>
Tree	bgp-mh-site
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[site-name] *named-item*

Synopsis	Name for the specific site
Context	configure service epipe <i>service-name</i> bgp-mh-site <i>named-item</i>

Tree	bgp-mh-site
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activation-timer *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	configure service epipe <i>service-name</i> bgp-mh-site <i>named-item</i> activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the site
Context	configure service epipe <i>service-name</i> bgp-mh-site <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure service epipe <i>service-name</i> bgp-mh-site <i>named-item</i> boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Units	seconds
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Site ID for the service
Context	configure <i>service epipe</i> <i>service-name bgp-mh-site</i> <i>named-item id number</i>
Tree	<i>id</i>
Description	This command configures the ID for the site. The ID must match between services but is local to the service.
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-down-timer *number*

Synopsis	Minimum down time when site goes operationally down
Context	configure <i>service epipe</i> <i>service-name bgp-mh-site</i> <i>named-item min-down-timer number</i>
Tree	<i>min-down-timer</i>
Range	0 to 100
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Preference to advertise in NLRI L2 extended community
Context	configure <i>service epipe</i> <i>service-name bgp-mh-site</i> <i>named-item preference number</i>
Tree	<i>preference</i>
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap sap

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	configure service epipe <i>service-name</i> bgp-mh-site <i>named-item</i> sap sap
Tree	sap
String length	1 to 45
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-vpws

Synopsis	Enable the bgp-vpws context
Context	configure service epipe <i>service-name</i> bgp-vpws
Tree	bgp-vpws
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the VPWS edge instance
Context	configure service epipe <i>service-name</i> bgp-vpws admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-ve

Synopsis	Enter the local-ve context
Context	configure service epipe <i>service-name</i> bgp-vpws local-ve
Tree	local-ve

Introduced25.3.R2

Platforms7705 SAR Gen 2

id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisLocal VPWS edge ID

Context**configure** *service* *epipe* *service-name* *bgp-vpws* *local-ve* *id* *number*

Tree*id*

Range1 to 65535

Introduced25.3.R2

Platforms7705 SAR Gen 2

name *named-item*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisLocal VPWS instance name

Context**configure** *service* *epipe* *service-name* *bgp-vpws* *local-ve* *name* *named-item*

Tree*name*

String length1 to 32

String format'string-not-all-spaces' must contain at least one non-space character

Introduced25.3.R2

Platforms7705 SAR Gen 2

remote-ve [*name*] *named-item*

SynopsisEnter the **remote-ve** list instance

Context**configure** *service* *epipe* *service-name* *bgp-vpws* *remote-ve* *named-item*

Tree*remote-ve*

Max.
instances2

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis Remote PE name to which a PW is to be signaled
 Context **configure** *service epipe* *service-name* *bgp-vpws remote-ve* *named-item*
 Tree *remote-ve*
 String length 1 to 32
 String format 'string-not-all-spaces' must contain at least one non-space character
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

id *number*

Synopsis Remote VPWS edge ID
 Context **configure** *service epipe* *service-name* *bgp-vpws remote-ve* *named-item* *id* *number*
 Tree *id*
 Range 1 to 65535
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID
 Context **configure** *service epipe* *service-name* *customer* *reference*
 Tree *customer*
 Reference **configure** *service* *customer* *customer-name*
 Notes This element is mandatory.
 Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** *service epipe* *service-name* **description** *description*

Tree **description**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

endpoint [*name*] *named-item*

Synopsis Enter the **endpoint** list instance

Context **configure** *service epipe* *service-name* **endpoint** *named-item*

Tree **endpoint**

Max.
instances 2

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis Service endpoint name

Context **configure** *service epipe* *service-name* **endpoint** *named-item*

Tree **endpoint**

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service epipe <i>service-name</i> endpoint <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time-active *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	configure service epipe <i>service-name</i> endpoint <i>named-item</i> hold-time-active <i>number</i>
Tree	hold-time-active
Range	1 to 60
Units	deciseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	configure service epipe <i>service-name</i> endpoint <i>named-item</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-signaling *keyword*

Synopsis	Endpoint behavior to handle the PW standby bit
Context	configure service epipe <i>service-name</i> endpoint <i>named-item</i> standby-signaling <i>keyword</i>
Tree	standby-signaling
Options	master, slave
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-l2vpn-mtu-mismatch *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	configure service epipe <i>service-name</i> ignore-l2vpn-mtu-mismatch <i>boolean</i>
Tree	ignore-l2vpn-mtu-mismatch
Description	<p>When configured to true, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPWS service regardless of any MTU mismatch.</p> <p>When configured to false, an MTU mismatch prevents the system from bringing up a BGP-VPWS service.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service epipe <i>service-name</i> load-balancing
Tree	load-balancing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	configure service epipe <i>service-name</i> load-balancing per-service-hashing <i>boolean</i>

Tree	per-service-hashing
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Oper-group name
Context	configure service epipe <i>service-name</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	configure service epipe <i>service-name</i> sap <i>sap</i>
Tree	sap
Description	<p>Commands in this context configure a SAP within a service. A SAP is a combination of port and encapsulation parameters which identifies the SAP on the interface and within the device. Each SAP must be unique.</p> <p>All SAPs must be explicitly created. If no SAPs are created within a service or on an IP interface, a SAP does not exist on that object.</p> <p>A SAP can only be associated with a single service. A SAP can only be defined on a port that has been configured as an access port.</p>
Max. instances	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *sap*

Synopsis	SAP ID
Context	configure service epipe <i>service-name</i> sap <i>sap</i>
Tree	sap

String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service epipe <i>service-name</i> sap <i>sap</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service epipe <i>service-name</i> sap <i>sap</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service epipe <i>service-name</i> sap <i>sap</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service epipe <i>service-name</i> sap sap collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *long-description*

Synopsis	Text description
Context	configure service epipe <i>service-name</i> sap sap description <i>long-description</i>
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service epipe <i>service-name</i> sap sap dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service epipe <i>service-name</i> sap sap egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress filter
Tree	filter
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ip reference

Synopsis IPv4 filter policy name

Context **configure** service epipe service-name sap sap egress filter ip reference

Tree ip

Reference **configure** filter ip-filter filter-name

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** service epipe service-name sap sap egress filter ipv6 reference

Tree ipv6

Reference **configure** filter ipv6-filter filter-name

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

qos

Synopsis Enter the **qos** context

Context **configure** service epipe service-name sap sap egress qos

Tree qos

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure** service epipe service-name sap sap egress qos policer-control-policy

Tree policer-control-policy

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service epipe <i>service-name</i> sap sap egress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure service epipe <i>service-name</i> sap sap egress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service epipe <i>service-name</i> sap sap egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service epipe <i>service-name</i> sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure** *service epipe* *service-name sap* *sap egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation* (*number* | *keyword*)

Tree *min-thresh-separation*

Range 0 to 16777216

Units bytes

Options auto

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority [*priority-level*] *number*

Synopsis Enter the **priority** list instance

Context **configure** *service epipe* *service-name sap* *sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority* *number*

Tree *priority*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[priority-level] *number*

Synopsis Priority level

Context **configure** *service epipe* *service-name sap* *sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority* *number*

Tree *priority*

Range 1 to 8

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service epipe <i>service-name</i> sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service epipe <i>service-name</i> sap sap egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress
Tree	sap-egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides
Tree	overrides

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
Context **configure** [service epipe](#) *service-name* [sap](#) [sap egress qos sap-egress overrides policer reference](#)
Tree [policer](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[policer-id] *reference*

Synopsis Policer unique ID
Context **configure** [service epipe](#) *service-name* [sap](#) [sap egress qos sap-egress overrides policer reference](#)
Tree [policer](#)
Reference **configure** [qos sap-egress](#) *qos-policy-name* [policer](#) *number*
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis CBS
Context **configure** [service epipe](#) *service-name* [sap](#) [sap egress qos sap-egress overrides policer reference](#) [cbs](#) (*number* | *keyword*)
Tree [cbs](#)
Range 0 to 268435456
Units bytes
Options auto
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
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Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides policer reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	PIR percent rate
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides policer reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides policer reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (number | keyword)

Synopsis	CIR rate
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] reference

Synopsis	Policer unique ID
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference
Tree	queue
Reference	configure qos sap-egress <i>qos-policy-name</i> queue number
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference adaptation-rule pir keyword
Tree	pir

Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Description	This command configures overrides for the average frame overhead. The overrides supersede the average frame overhead configuration under the queue. For a full description of this command, see the configure qos network-queue queue avg-frame-overhead and configure qos sap-egress queue avg-frame-overhead contexts.
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference drop-tail
Tree	drop-tail

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
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Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress policy-name reference
Tree	policy-name
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress port-redirect-group

Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of port queue group
Context	configure service epipe <i>service-name</i> sap sap egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service epipe <i>service-name</i> sap sap egress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service epipe <i>service-name</i> sap sap egress qos scheduler-policy overrides

Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure service epipe <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service epipe <i>service-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service epipe <i>service-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service epipe <i>service-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>service-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service epipe](#) *service-name* [sap](#) *sap* [egress qos scheduler-policy overrides scheduler](#) *named-item* [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

Range 0 to 6400000000

Units kilobps

Options sum, max

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis PIR at which the queue is to operate

Context **configure** [service epipe](#) *service-name* [sap](#) *sap* [egress qos scheduler-policy overrides scheduler](#) *named-item* [rate pir](#) (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Units kilobps

Options max

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service epipe](#) *service-name* [sap](#) *sap* [egress qos scheduler-policy](#) *policy-name* *reference*

Tree [policy-name](#)

Reference **configure** [qos scheduler-policy](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

endpoint *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the endpoint
Context	configure service epipe <i>service-name</i> sap <i>sap</i> endpoint <i>reference</i>
Tree	endpoint
Reference	configure service epipe <i>service-name</i> endpoint <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> eth-cfm
Tree	eth-cfm
Description	Commands in this context configure ETH-CFM options for Epipe SAPs.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*

Synopsis	Enter the mep list instance
Context	configure service epipe <i>service-name</i> sap <i>sap</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
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Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain <i>admin-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain <i>admin-name association admin-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ais

Synopsis	Enable the ais context
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Description	Commands in this context enable the reception of AIS messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level <i>number</i>
Tree	client-meg-level
Description	This command configures the client Maintenance Entity Group (MEG) level to use for AIS message generation. One restriction is that the client MEG level must be higher than the local MEG level. Only the lowest client MEG level is used for facility MEPs.
Range	1 to 7
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support <i>boolean</i>
Tree	interface-support

Description	<p>When configured to true, the system enables the generation of AIS PDUs based on the associated endpoint state.</p> <p>AIS on Down MEPs triggers and clears based on the operational status of the entity it is configured on. If CCM is configured to true, transmission of the AIS PDU is based on either the nonoperational state of the entity or on any CCM defect conditions. AIS generation ceases if both the operational state is up and CCM has no defect conditions. If the MEP is not enabled with CCM, the operational state of the entity is the only consideration, assuming the command is present for the MEP.</p> <p>When configured to false, the generation of AIS PDUs is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval number

Synopsis	Transmission interval for AIS messages
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>sap</i> <i>sap</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>ais</i> <i>interval</i> <i>number</i>
Tree	<i>interval</i>
Range	1 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect keyword

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>sap</i> <i>sap</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>ais</i> <i>low-priority-defect</i> <i>keyword</i>
Tree	<i>low-priority-defect</i>
Options	<p>all-def – Generate AIS frame for any defect in CCM state machine</p> <p>mac-rem-err-xcon – Generate AIS frame for def-mac-status defect or higher</p>
Default	all-def
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service epipe service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service epipe service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service epipe service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure service epipe <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>description</i> <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure service epipe <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which the MEP faces on the bridge port.
Options	down – Send ETH-CFM messages toward the MAC relay entity up – Send ETH-CFM messages away from the MAC relay entity
Default	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
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Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern <i>pattern</i> keyword
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv – Use the interface TLV suspend-ccm – Suspend continuity check messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis	MAC address of the MEP
Context	configure service epipe <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>mac-unicast-address-no-zero</i>

Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service epipe <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ethernet

Synopsis	Enter the ethernet context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ethernet
Tree	ethernet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

llf

Synopsis	Enter the llf context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ethernet llf
Tree	llf
Description	Commands in this context enable Link Loss Forwarding (LLF) on an Ethernet port. This feature provides an end-to-end OAM fault notification for Ethernet VLL service. It brings down the Ethernet port (Ethernet LLF) or sends a SONET/SDH Path AIS (ATM LLF) toward the attached CE when there is a local fault on the pseudowire or service, or a

remote fault on the SAP or pseudowire, signaled with label withdrawal or T-LDP status bits. It ceases when the fault disappears.

The Ethernet port must be configured for null encapsulation.

This feature is also supported in Epipes with BGP-EVPN enabled. In this case, after removal of the EVPN destination, the port transitions to an operationally down state, however the AD per-EVI route for the SAP is still advertised (the SAP remains operationally up). The port transitions to the operationally up state when the EVPN destination is created.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of Link Loss Forwarding
Context **configure** *service epipe service-name sap sap ethernet llf admin-state keyword*
Tree *admin-state*
Options enable, disable
Default disable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ignore-oper-down *boolean*

Synopsis Ignore operational down state of the SAP on SAP failure
Context **configure** *service epipe service-name sap sap ignore-oper-down boolean*
Tree *ignore-oper-down*
Description When configured to **true**, the Epipe service does not transition to the operational down state when the SAP fails. This command can only be set to **true** for a single SAP in an Epipe. The command can be used in Epipes with or without EVPN enabled.
When configured to **false**, the Epipe service transitions to the operational down state when SAP fails.
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service epipe <i>service-name</i> sap sap ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>service-name</i> sap sap ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service epipe <i>service-name</i> sap sap ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service epipe <i>service-name</i> sap sap ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service epipe <i>service-name</i> sap sap ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service epipe <i>service-name</i> sap sap ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service epipe <i>service-name</i> sap sap ingress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure service epipe <i>service-name</i> sap sap ingress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
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Context	configure service epipe service-name sap sap ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[priority-level] number

Synopsis	Priority level
Context	configure service epipe service-name sap sap ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (number | keyword)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service epipe service-name sap sap ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number mbs-contribution (number keyword)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name reference

Synopsis	Policer control policy name
Context	configure service epipe service-name sap sap ingress qos policer-control-policy policy-name reference
Tree	policy-name

Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress
Tree	sap-ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress fp-redirect-group <i>group-name</i> <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue group instance
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress fp-redirect-group <i>instance</i> <i>number</i>

Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
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Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference cbs (<i>number keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number | keyword*)

Synopsis	MBS
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference mbs (<i>number keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference percent-rate

Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos <i>sap-ingress overrides</i> policer <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos <i>sap-ingress overrides</i> policer <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos <i>sap-ingress overrides</i> policer <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference
Tree	queue
Reference	configure qos sap-ingress <i>qos-policy-name</i> queue number
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
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Context	configure service epipe <i>service-name sap sap ingress qos sap-ingress overrides queue reference parent</i>
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service epipe <i>service-name sap sap ingress qos sap-ingress overrides queue reference parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service epipe <i>service-name sap sap ingress qos sap-ingress overrides queue reference parent weight number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service epipe <i>service-name sap sap ingress qos sap-ingress overrides queue reference percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service epipe <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir

Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress policy-name reference
Tree	policy-name
Reference	configure qos sap-ingress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service epipe <i>service-name</i> sap sap ingress qos scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service epipe <i>service-name</i> sap sap ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure service epipe <i>service-name</i> sap sap ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

parent

Synopsis Enter the **parent** context
Context **configure** [service epipe](#) *service-name* [sap sap](#) [ingress qos scheduler-policy overrides scheduler](#) *named-item* **parent**
Tree [parent](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
Context **configure** [service epipe](#) *service-name* [sap sap](#) [ingress qos scheduler-policy overrides scheduler](#) *named-item* [parent cir-weight](#) *number*
Tree [cir-weight](#)
Range 0 to 100
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
Context **configure** [service epipe](#) *service-name* [sap sap](#) [ingress qos scheduler-policy overrides scheduler](#) *named-item* [parent weight](#) *number*
Tree [weight](#)
Range 0 to 100
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

rate

Synopsis Enter the **rate** context
Context **configure** [service epipe](#) *service-name* [sap sap](#) [ingress qos scheduler-policy overrides scheduler](#) *named-item* **rate**

Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service epipe <i>service-name</i> sap sap ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service epipe <i>service-name</i> sap sap ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service epipe <i>service-name</i> sap sap ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

qtag-manipulation

Synopsis Enter the **qtag-manipulation** context

Context **configure service epipe service-name sap sap ingress qtag-manipulation**

Tree [qtag-manipulation](#)

Description Commands in this context configure ingress VLAN translation.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

c-tag (*number* | *keyword*)

Synopsis Inner C-tag value for ingress QinQ VLAN translation

Context **configure service epipe service-name sap sap ingress qtag-manipulation c-tag** (*number* | *keyword*)

Tree [c-tag](#)

Range 0 to 4094

Options tag-*

Notes The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

push-dot1q-vlan (*number* | *keyword*)

Synopsis VLAN translation information

Context **configure service epipe service-name sap sap ingress qtag-manipulation push-dot1q-vlan** (*number* | *keyword*)

Tree [push-dot1q-vlan](#)

Description This command configures the router to overwrite the preserved VLAN ID with the configured value during VLAN translation. Configuring an explicit VLAN ID is supported only on dot1q encapsulated ports, and copying the outer VLAN ID to the inner position is supported only on QinQ encapsulated ports.

Range 0 to 4094

Options use-sap-svlan – Copy the outer VLAN ID to inner position

Notes The following elements are part of a choice: **push-dot1q-vlan** or (**c-tag** and **s-tag**).

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

s-tag *number*

Synopsis	Outer S-tag value for ingress QinQ VLAN translation
Context	configure service epipe <i>service-name</i> sap <i>sap</i> ingress qtag-manipulation s-tag <i>number</i>
Tree	s-tag
Range	0 to 4094
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Enter the lag context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-ring

Synopsis	Enable the mc-ring context
Context	configure service epipe <i>service-name</i> sap <i>sap</i> mc-ring
Tree	mc-ring
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ring-node *named-item*

Synopsis	Name for the ring node associated with this SAP
Context	configure service epipe <i>service-name</i> sap <i>sap</i> mc-ring ring-node <i>named-item</i>
Tree	ring-node
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	configure service epipe <i>service-name</i> sap <i>sap</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service epipe <i>service-name</i> sap <i>sap</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group
Context	configure service epipe <i>service-name</i> sap <i>sap</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>service-id</i> <i>number</i>
Tree	<i>service-id</i>
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-mtu *number*

Synopsis	MTU size
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>service-mtu</i> <i>number</i>
Tree	<i>service-mtu</i>
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9782
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
Description	<p>Commands in this context bind a service to an existing SDP. A spoke SDP is treated like a traditional bridge "port" where flooded traffic received on the spoke SDP is replicated on all other "ports" (other spoke and mesh SDPs or SAPs) and not transmitted on the port it was received.</p> <p>The SDP has an operational state that determines the operational state of the SDP within the service. For example, if the SDP is administratively or operationally down, the SDP for the service is down.</p> <p>The SDP must already be defined in the configure service sdp context to associate an SDP with an Epipe, VPLS, VPRN, or VPRN service. SDPs must be explicitly associated and bound to a service. If an SDP is not bound to a service, no far-end devices can participate in the service.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis	SDP binding ID
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

accounting-policy *reference*

Synopsis Policy to collect accounting statistics

Context **configure** [service epipe](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [accounting-policy reference](#)

Tree [accounting-policy](#)

Reference **configure** [log accounting-policy](#) *number*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service

Context **configure** [service epipe](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adv-service-mtu *number*

Synopsis Service MTU used in signaling

Context **configure** [service epipe](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [adv-service-mtu](#) *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP, instead of the service MTU. However, the configuration does not affect the locally enforced value, which is still based on the service MTU.

This MTU value cannot be configured on a spoke-SDP that is bound to an SDP with the **adv-mtu-override** command (**configure service sdp** context).

When unconfigured, an adjusted service MTU is used (**service-mtu** command).

Range 0 to 9782

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bandwidth (*number* | *keyword*)

Synopsis	Bandwidth that is reserved for this SDP binding
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> bandwidth (<i>number</i> <i>keyword</i>)
Tree	bandwidth
Range	0 to 1000000000
Units	kilobps
Options	max
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> control-word <i>boolean</i>
Tree	control-word
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> description <i>description</i>

Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
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Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress</i> <i>filter</i> <i>ipv6</i> <i>reference</i>
Tree	<i>ipv6</i>
Reference	configure <i>filter</i> <i>ipv6-filter</i> <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress</i> <i>qos</i>
Tree	<i>qos</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress</i> <i>qos</i> <i>network</i>
Tree	<i>network</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress</i> <i>qos</i> <i>network</i> <i>policy-name</i> <i>reference</i>
Tree	<i>policy-name</i>
Reference	configure <i>qos</i> <i>network</i> <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
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Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue-group instance ID
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

endpoint

Synopsis Enter the **endpoint** context

Context **configure** *service epipe* *service-name spoke-sdp* *sdp-bind-id endpoint*

Tree *endpoint*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

icb *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Bind SDP as type Inter-Chassis Backup (ICB)

Context **configure** *service epipe* *service-name spoke-sdp* *sdp-bind-id endpoint* *icb boolean*

Tree *icb*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Service endpoint name

Context **configure** *service epipe* *service-name spoke-sdp* *sdp-bind-id endpoint* *name reference*

Tree *name*

Reference **configure** *service epipe* *service-name endpoint* *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

precedence (*number* | *keyword*)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> endpoint precedence (<i>number</i> <i>keyword</i>)
Tree	<i>precedence</i>
Range	1 to 4
Options	primary
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> entropy-label
Tree	<i>entropy-label</i>
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> eth-cfm
Tree	<i>eth-cfm</i>
Description	Commands in this context configure ETH-CFM command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Synopsis	Enter the mep list instance
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i>

Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>admin-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>admin-name</i> association <i>admin-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ais

Synopsis	Enable the ais context
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Description	Commands in this context enable the reception of AIS messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level <i>number</i>
Tree	client-meg-level
Description	This command configures the client Maintenance Entity Group (MEG) level to use for AIS message generation. One restriction is that the client MEG level must be higher than the local MEG level. Only the lowest client MEG level is used for facility MEPs.
Range	1 to 7
Max. instances	7
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support <i>boolean</i>
Tree	interface-support
Description	<p>When configured to true, the system enables the generation of AIS PDUs based on the associated endpoint state.</p> <p>AIS on Down MEPs triggers and clears based on the operational status of the entity it is configured on. If CCM is configured to true, transmission of the AIS PDU is based on either the nonoperational state of the entity or on any CCM defect conditions. AIS generation ceases if both the operational state is up and CCM has no defect conditions. If the MEP is not enabled with CCM, the operational state of the entity is the only consideration, assuming the command is present for the MEP.</p> <p>When configured to false, the generation of AIS PDUs is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval <i>number</i>
Tree	interval
Range	1 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Options	all-def – Generate AIS frame for any defect in CCM state machine mac-rem-err-xcon – Generate AIS frame for def-mac-status defect or higher
Default	all-def
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean
Tree	ccm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
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Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>ccm-ltm-priority</i> <i>number</i>
Tree	<i>ccm-ltm-priority</i>
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>description</i> <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure <i>service</i> <i>epipe</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>direction</i> <i>keyword</i>
Tree	<i>direction</i>
Description	This command configures the direction in which the MEP faces on the bridge port.
Options	down – Send ETH-CFM messages toward the MAC relay entity up – Send ETH-CFM messages away from the MAC relay entity
Default	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service epipe service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv – Use the interface TLV suspend-ccm – Suspend continuity check messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis	MAC address of the MEP
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>mac-unicast-address-no-zero</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

force-vc-forwarding *keyword*

Synopsis	VLAN tag processing action
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Description	<p>This command configures the VLAN tag processing used on the service.</p> <p>The vlan option configures the router to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag, which is sent in the customer frame to the EVPN destinations.</p> <p>The qinq-c-tag-c-tag option configures the router to pushes two tags with the same value derived from the inner service delimiting tag. At network ingress, two VLAN tags are extracted at most and the C-tag and S-tag p/de bits are propagated to the egress SAPs.</p> <p>The qinq-s-tag-c-tag option configures the router to push two tags that are copied from the QinQ service-delimiting VLAN values and may be different. At network ingress, two VLAN tags are extracted at most and the p/de bits are propagated to the egress SAP service-delimiting S-tag and C-tag respectively.</p>
Options	vlan – Push VLAN ID and 802.1p bits of service-delimiting qtag qinq-c-tag-c-tag – Push two tags identical to inner service-delimiting tag qinq-s-tag-c-tag – Push two tags based on QinQ service-delimiting values
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label

Synopsis	Enable the hash-label context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label
Tree	hash-label
Description	<p>Commands in this context configure the use of hash labels for egress datapaths.</p> <p>For information about hash-label handling, see the "Hash label" section of the <i>7705 SAR Gen 2 MPLS Guide</i>.</p>
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label signal-capability
Tree	signal-capability
Description	<p>When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.</p> <p>The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2

Platforms7705 SAR Gen 2

ipv6 reference

SynopsisIPv6 filter policy name

Context**configure** service epipe service-name spoke-sdp sdp-bind-id ingress filter ipv6 reference

Treeipv6

Reference**configure** filter ipv6-filter filter-name

Introduced25.3.R2

Platforms7705 SAR Gen 2

qos

SynopsisEnter the qos context

Context**configure** service epipe service-name spoke-sdp sdp-bind-id ingress qos

Treeqos

Introduced25.3.R2

Platforms7705 SAR Gen 2

network

SynopsisEnter the network context

Context**configure** service epipe service-name spoke-sdp sdp-bind-id ingress qos network

Tree**network**

Introduced25.3.R2

Platforms7705 SAR Gen 2

fp-redirect-group

SynopsisEnter the fp-redirect-group context

Context**configure** service epipe service-name spoke-sdp sdp-bind-id ingress qos network fp-redirect-group

Treefp-redirect-group

Introduced25.3.R2

Platforms7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
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Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Operational group that affects state of the SDP bind
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group identifier
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-status

Synopsis	Enter the pw-status context
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> pw-status
Tree	pw-status
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-on-peer-fault *boolean*

Synopsis	Block transmit direction of PW based on status code
Context	configure service epipe service-name spoke-sdp sdp-bind-id pw-status block-on-peer-fault <i>boolean</i>
Tree	block-on-peer-fault
Default	false
Notes	The following elements are part of a choice: block-on-peer-fault or standby-signaling-slave .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signaling *boolean*

Synopsis	Allow SDP binding to support pseudowire status signaling
Context	configure service epipe service-name spoke-sdp sdp-bind-id pw-status signaling <i>boolean</i>
Tree	signaling
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-signaling-slave *boolean*

Synopsis	Block spoke transmission based on PW standby status
Context	configure service epipe service-name spoke-sdp sdp-bind-id pw-status standby-signaling-slave <i>boolean</i>
Tree	standby-signaling-slave
Default	false
Notes	The following elements are part of a choice: block-on-peer-fault or standby-signaling-slave .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-type *keyword*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Virtual circuit type associated with the SDP binding
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> vc-type <i>keyword</i>
Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	configure service epipe <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> vlan-vc-tag <i>number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test *boolean*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	configure service epipe <i>service-name</i> test <i>boolean</i>
Tree	test
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-switching *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	configure service epipe <i>service-name</i> vc-switching <i>boolean</i>
Tree	vc-switching
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure service epipe <i>service-name</i> vpn-id <i>number</i>
Tree	vpn-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ies [*service-name*] *service-name*

Synopsis	Enter the ies list instance
Context	configure service ies <i>service-name</i>
Tree	ies
Description	<p>Commands in this context specify an IES service instance.</p> <p>Multiple IES services are created to separate customer-owned IP interfaces. More than one IES service can be created for a single customer ID. More than one IP interface can be created within a single IES service ID. All IP interfaces created within an IES service ID belong to the same customer.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[service-name] *service-name*

Synopsis	Administrative service name
Context	configure service ies <i>service-name</i>
Tree	ies
Description	<p>This command creates or edits a service instance.</p> <p>When a service is created, the customer keyword and <i>customer-id</i> must be specified and associates the service with a customer. The <i>customer-id</i> must already exist having been created using the customer command in the service context. When a service is created with a customer association, it is not possible to edit the customer association. The service must be deleted and re-created with a new customer association.</p> <p>When a service is created, the use of the customer<i>customer-id</i> is optional to navigate into the service configuration context. If attempting to edit a service with the incorrect <i>customer-id</i> results in an error.</p> <p>This command specifies the unique service identification number identifying the service in the service domain. This ID must be unique to this service and may not be used for any other service of any type. The service ID must be the same number used for every platform on which this service is defined.</p>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service ies <i>service-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

customer *reference*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service ies <i>service-name</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>customer-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service ies <i>service-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [**interface-name**] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i>
Tree	interface
Description	Commands in this context create a logical IP routing interface. When created, attributes such as an IP address and SAP ID can be associated with the IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

autoconfigure

Synopsis	Enter the autoconfigure context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure
Tree	autoconfigure
Description	Commands in this context configure the autoconfigure functionality for the interface.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4
Tree	ipv4
Description	Commands in this context configure IPv4 autoconfigure settings.

Introduced	25.7.R1
Platforms	7705 SAR Gen 2

dhcp-client

Synopsis	Enable the dhcp-client context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client
Tree	dhcp-client
Description	Commands in this context configure the node as an IPv4 DHCP client. When the node operates as a DHCP client, it learns the IP address of the interface via dynamic IP address assignment.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP client
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

class-id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the class-id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id
Tree	class-id
Description	Commands in this context configure the vendor class ID for the DHCP client.

Introduced 25.7.R1
Platforms 7705 SAR Gen 2

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Vendor class ID as an ASCII string
Context **configure** *service ies service-name interface interface-name autoconfigure ipv4 dhcp-client class-id* **ascii-string** *string*
Tree **ascii-string**
String length 1 to 127
Notes The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

hex-string *hex-string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Vendor class ID as a hexadecimal string
Context **configure** *service ies service-name interface interface-name autoconfigure ipv4 dhcp-client class-id* **hex-string** *hex-string*
Tree **hex-string**
String length 1 to 256
String format 'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes The following elements are part of a choice: **ascii-string** or **hex-string**.
Introduced 25.7.R1
Platforms 7705 SAR Gen 2

client-id

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the client-id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id
Tree	client-id
Description	Commands in this context configure the client ID for the DHCP client.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ascii-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client ID as an ASCII string
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 127
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

hex-string *hex-string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client ID as a hexadecimal string
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id hex-string <i>hex-string</i>

Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

interface



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interface name as the client ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client <i>client-id</i> interface
Tree	interface
Description	This command configures the node to use the interface name as the client ID.
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

mac



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address as the client ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client <i>client-id</i> mac
Tree	mac
Description	This command configures the node to use the MAC address as the client ID.
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

lease-time (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lease time the DHCP client requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client lease-time (<i>number</i> <i>keyword</i>)
Tree	lease-time
Description	This command configures the lease time that the DHCP client requests to the DHCP server. The DHCP server can override the configured value.
Range	10 to 315446399
Units	seconds
Options	infinite – Request an infinite lease with no expiry
Default	86400
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

request-options**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the request-options context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options
Tree	request-options
Description	Commands in this context configure the DHCP options to include in the parameter request list as part of the DHCPREQUEST message to the server.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

dns-server *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include the DNS server option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options dns-server <i>boolean</i>
Tree	dns-server
Description	When configured to true , the node includes the DNS server option (Option 54) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

router *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include the router option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options router <i>boolean</i>
Tree	router
Description	When configured to true , the node includes the router option (Option 3) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

static-route *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include the static route option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options static-route <i>boolean</i>
Tree	static-route
Description	When configured to true , the node includes the static route option (Option 121) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-tunnel-redundant-nexthop *ipv4-unicast-address*

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> dynamic-tunnel-redundant-nexthop <i>ipv4-unicast-address</i>
Tree	dynamic-tunnel-redundant-nexthop
Description	<p>This command configures a redundant next-hop address on a public or private IPsec interface (with a public or private tunnel SAP) for dynamic IPsec tunnel in 1:1 MC-IPsec. A standby node uses the specified next-hop address to shunt traffic to the master in case it receives traffic destined to a tunnel endpoint address. The standby tunnel group needs to be operationally up for the feature to work.</p> <p>The next-hop address is resolved in the routing table of a corresponding service.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

hold-time

Synopsis Enter the **hold-time** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **hold-time**

Tree [hold-time](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4

Synopsis Enter the **ipv4** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **hold-time** [ipv4](#)

Tree [ipv4](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

down

Synopsis Enter the **down** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **hold-time** [ipv4](#) **down**

Tree [down](#)

Description Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **hold-time** [ipv4](#) **down** **init-only** *boolean*

Tree [init-only](#)

Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up

Synopsis	Enter the up context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down

Synopsis	Enter the down context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 down init-only <i>boolean</i>
Tree	init-only
Description	When configured to true , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up

Synopsis	Enter the up context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

if-attribute

Synopsis	Enter the if-attribute context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> if-attribute
Tree	if-attribute
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> if-attribute admin-group <i>reference</i>
Tree	admin-group
Description	This command specifies the administrative group membership to an interface. The configured administrative group membership is applied in all levels or areas the interface is participating in. The same interface cannot have different memberships in different levels or areas.
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg-group [[name](#)] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *reference*

Synopsis	SRLG name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>named-item</i>

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-tunnel-interface *boolean*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable IP tunnel interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ip-tunnel-interface <i>boolean</i>
Tree	ip-tunnel-interface
Description	When configured to true , the system enables a GRE virtual IP interface.
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ipsec

Synopsis Enable the **ipsec** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **ipsec**

Tree [ipsec](#)

Description Commands in this context configure an IPsec secured interface.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis Administrative state of IPsec secured interface

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **ipsec** **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-exception *reference*

Synopsis IP exception filter

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* **ipsec** **ip-exception** *reference*

Tree [ip-exception](#)

Description This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.

Reference **configure** [filter](#) [ip-exception](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-tunnel [[name](#)] *named-item*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec tunnel name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'name' must not start with a number (e.g. tunnel-1)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-designate *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-liveness

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness
Tree	bfd-liveness

Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dest-ip *ipv4-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item bfd bfd-liveness</i> dest-ip <i>ipv4-unicast-address</i>
Tree	dest-ip
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interface *interface-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item bfd bfd-liveness</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

service-name *service-name*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness service-name <i>service-name</i>
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

clear-df-bit *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

copy-traffic-class-upon-decapsulation *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu

Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item icmp-generation frag-required admin-state</i> <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item icmp-generation frag-required interval</i> <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

packet-too-big

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item icmp6-generation packet-too-big</i>
Tree	packet-too-big
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item icmp6-generation packet-too-big admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item icmp6-generation packet-too-big interval number</i>
Tree	interval

Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange
Tree	key-exchange
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Description	<p>When configured to true, the system automatically attempts to establish a phase 1 exchange.</p> <p>The system automatically establishes phase 1 SA as soon as the tunnel is provisioned and enabled. This command should only be configured on one side of the tunnel.</p> <p>Static routes that use the auto-establish tunnel as the next hop are brought down when the tunnel goes down.</p> <p>When configured to false, the system does not automatically attempt to establish a phase 1 exchange.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish-sustain *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable sustain mode for auto-establish tunnels
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish-sustain <i>boolean</i>
Tree	auto-establish-sustain
Description	<p>When configured to true, the tunnel initiator keeps the IKE_SA and CHILD_SA up to prevent phase 2 expiry when there is no traffic, and starts a new exchange to establish a replacement when the peer deletes the SA.</p> <p>When configured to false, the tunnel initiator does not prevent the SA from expiring and does not establish a replacement when the peer deletes the SA.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result keyword

Synopsis	Default result for Certificate Status Verification
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary keyword

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary keyword

Synopsis	Secondary method used to verify certificate revocation
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
String length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the ppk context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk
Tree	ppk
Description	Commands in this context configure the PPKs to use for dynamic keying of the IPsec tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPK ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk id <i>reference</i>
Tree	id
Reference	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

list reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPK list instance name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk list <i>reference</i>

Tree	list
Reference	configure ipsec ppk-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic pre-shared-key <i>encrypted-leaf</i>
Tree	pre-shared-key
Description	This command specifies the pre-shared key for authentication in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reverse-route-injection



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the reverse-route-injection context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection
Tree	reverse-route-injection
Description	Commands in this context configure reverse route injection for IPsec tunnels. When reverse route injection is enabled, the system injects routes into the service based on the final TSr. One route is created for each TS in the TSr, with the prefix length as the longest number that covers the address range in the TS. The system removes the reverse route when the corresponding CHILD_SA is removed.
Introduced	26.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Metric to use for reverse route injection
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection metric <i>number</i>
Tree	metric
Description	<p>This command configures the metric for reverse routes installed by reverse route injection. The system uses the metric when selecting a route to install in the route table.</p> <p>If there are multiple reverse routes with the same preference but different metrics, the lower cost (metric) route is installed.</p>
Range	0 to 65535
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

preference *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference to use for reverse route injection
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection preference <i>number</i>
Tree	preference
Description	<p>This command configures the route preference assigned to reverse routes installed by reverse route injection. The system uses this preference when selecting a route to install in the route table. The lower the preference value, the more the route is preferred by the system.</p>
Range	0 to 255
Default	0
Introduced	26.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keys [**security-association**] *number direction keyword*

Synopsis	Enter the keys list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number direction keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[**security-association**] *number*

Synopsis	SA entry ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number direction keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

direction *keyword*

Synopsis Direction of the IPsec tunnel

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipsec ipsec-tunnel](#) *named-item* [key-exchange](#) [manual keys](#) *number* [direction](#) *keyword*

Tree [keys](#)

Options inbound, outbound

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-key *hex-string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the authentication algorithm

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipsec ipsec-tunnel](#) *named-item* [key-exchange](#) [manual keys](#) *number* [direction](#) *keyword* [authentication-key](#) *hex-string*

Tree [authentication-key](#)

String length 1 to 130

String format 'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encryption-key *hex-string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipsec ipsec-tunnel](#) *named-item* [key-exchange](#) [manual keys](#) *number* [direction](#) *keyword* [encryption-key](#) *hex-string*

Tree [encryption-key](#)

String length	1 to 66
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> ipsec-transform <i>reference</i>
Tree	ipsec-transform
Reference	configure ipsec ipsec-transform <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

spi *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i>
Tree	spi
Description	<p>This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.</p> <p>The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p>
Range	256 to 16383
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-gateway-address-override (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> local-gateway-address-override (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records ike <i>number</i>
Tree	ike
Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pmtu-discovery-aging number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-sap *number*

- **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.
- **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> private-sap <i>number</i>
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-service *service-name*

- **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.
- **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> private-service <i>service-name</i>
Tree	private-service
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String length	1 to 64
String format	'service-name' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-gateway-address (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> remote-gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	remote-gateway-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

replay-window number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

security-policy**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy

Tree	security-policy
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy id <i>number</i>
Tree	id
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

strict-match boolean**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec ipv6-exception <i>reference</i>
Tree	ipv6-exception
Description	This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.
Reference	configure filter ipv6-exception <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-sap *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec public-sap <i>number</i>
Tree	public-sap
Range	0 to 4094
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Reference	configure isa tunnel-group <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4

Synopsis	Enter the ipv4 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4
Tree	ipv4
Description	Commands in this context configure the IPv4 command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

addresses

Synopsis	Enter the addresses context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 addresses
Tree	addresses
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[ipv4-address](#)] *ipv4-unicast-address*

Synopsis	Enter the address list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 addresses address <i>ipv4-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-address] *ipv4-unicast-address*

Synopsis	IPv4 address for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 addresses address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 addresses address <i>ipv4-unicast-address</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the BFD command options for the associated IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier

Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive number

Synopsis	Receive interval
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd receive number
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval number

Synopsis	Transmit interval
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd transmit-interval number
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Local termination point for the BFD session
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 bfd type keyword

Tree	type
Options	cpm-np – Terminate on the CPM network processor auto – Terminate on the system-selected termination point fp – Terminate on the forwarding plane
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

Synopsis	Enter the dhcp context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp
Tree	dhcp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gi-address *ipv4-unicast-address*

Synopsis	GI address for the DHCP relay
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp gi-address <i>ipv4-unicast-address</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp lease-populate max-leases <i>number</i>
Tree	max-leases
Range	0 to 511999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option-82

Synopsis	Enter the option-82 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action keyword

Synopsis	Action to take with received DHCP Option 82
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 action <i>keyword</i>
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple

Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the circuit ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id

Synopsis	Use the SAP ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	<p>When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.</p> <p>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.</p>
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-id

Synopsis	Enter the remote-id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mac

Synopsis Use the MAC address for the remote ID

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv4 dhcp option-82](#)
[remote-id mac](#)

Tree [mac](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

none

Synopsis Do not include the remote ID

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv4 dhcp option-82](#)
[remote-id none](#)

Tree [none](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv4 dhcp option-82](#)
[vendor-specific-option](#)

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string-not-all-spaces*

Synopsis	User-defined ASCII string for the VSO
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option string <i>string-not-all-spaces</i>
Tree	string
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i>
Tree	system-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

emulated-server *ipv4-unicast-address*

Synopsis	IP address used as the DHCP server address for the SAP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server emulated-server <i>ipv4-unicast-address</i>
Tree	emulated-server
Description	This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-time

Synopsis	Enter the lease-time context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server lease-time
Tree	lease-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i>
Tree	radius-override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	DHCP lease time
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server lease-time value <i>number</i>
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relay-plain-bootp *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-plain-bootp boolean
Tree	relay-plain-bootp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relay-proxy

Synopsis	Enable the relay-proxy context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-proxy release-update-src-ip boolean
Tree	release-update-src-ip
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

siaddr-override *ipv4-unicast-address*

Synopsis	DHCP server IP address for address hiding function
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-proxy siaddr-override <i>ipv4-unicast-address</i>
Tree	siaddr-override
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv4-unicast-address*

Synopsis	IP addresses for DHCP server requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp server ipv4-unicast-address
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	8
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp src-ip-addr <i>keyword</i>

Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trusted boolean

Synopsis	Relay untrusted packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp trusted <i>boolean</i>
Tree	trusted
Description	<p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-arp boolean

Synopsis	Use ARP to determine the destination hardware address
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp use-arp <i>boolean</i>
Tree	use-arp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp

Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

param-problem

Synopsis	Enter the param-problem context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirects

Synopsis	Enter the redirects context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp ttl-expired number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp ttl-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unreachables

Synopsis	Enter the unreachables context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachables number <i>number</i>
Tree	number

Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachable seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-helper-address *ipv4-unicast-address*

Synopsis	Gateway address
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 ip-helper-address <i>ipv4-unicast-address</i>
Tree	ip-helper-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure router <i>named-item-64</i> dhcp-server dhcpv4 <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

nat

Synopsis Enable the **nat** context

Context **configure** **service** **ies** *service-name* **interface** *interface-name* **ipv4** **nat**

Tree **nat**

Description Commands in this context enable NAT and configure CPM NAT policies for the IPv4 interface.

These commands must be used in conjunction with NAT pools where the pool application is configured with the **configure router nat outside pool applications use-interface-ip** command.

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-nat-policy *reference*

Synopsis CPM NAT policy association with public IPv4 interface

Context **configure** **service** **ies** *service-name* **interface** *interface-name* **ipv4** **nat** **cpm-nat-policy** *reference*

Tree **cpm-nat-policy**

Description This command associates a CPM NAT policy to the interface. The NAT policy applies to traffic that either originates from, or is destined to, the local node itself (CPM traffic). Specifically, it is used when the traffic is routed through a public NAT IPv4 interface in the outside routing context.

A CPM NAT policy should be used when the local node communicates with public networks over NAT, and the source or destination is a local interface within the outside routing context. This can include the public IPv4 interface or any other interface assigned to that routing context.

Reference **configure** **service** **nat** **cpm-nat-policy** *external-named-item*

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-spf-nat-policy *reference*

Synopsis CPM NAT policy for static port forwards

Context **configure** **service** **ies** *service-name* **interface** *interface-name* **ipv4** **nat** **cpm-spf-nat-policy** *reference*

Tree	cpm-spf-nat-policy
Description	This command associates a CPM NAT policy to the interface for static port forwards. The configurations for traffic using static port forwards to a local IP address in the outside routing context are separate from those used for other CPM traffic going through NAT. This command allows the router to apply different NAT behavior for port-forwarded traffic than for general traffic originating from the local node.
Reference	configure service nat cpm-nat-policy <i>external-named-item</i>
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-route

Synopsis	Enter the host-route context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery host-route
Tree	host-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Description	Commands in this context enable the creation of ARP or ND host route entries in the route table from a certain ARP or ND entry type.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[route-type] keyword

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service ies service-name interface interface-name ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Options	static – Host routes created from EVPN ARP or ND entries dynamic – Host routes created from dynamic ARP or ND entries evpn – Host routes created from EVPN entries evpn-local-es – Host routes created from EVPN local ES entries
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag number**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service ies service-name interface interface-name ipv4 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-unsolicited boolean

Synopsis	Learn new entries from any received NA message
Context	configure service ies service-name interface interface-name ipv4 neighbor-discovery learn-unsolicited <i>boolean</i>
Tree	learn-unsolicited
Description	When configured to true , the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.

When configured to **false**, the router follows standard behavior for learning neighbor entries.

- If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.
- If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit

Synopsis	Enter the limit context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit
Tree	limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Range	0 to 524288

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold value that triggers a warning message
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery populate <i>boolean</i>
Tree	populate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i>
Tree	proactive-refresh
Description	<p>When configured to true, the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).</p> <p>When configured to false, the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-timer *number*

Synopsis	ARP retry interval
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 300
Units	deciseconds
Default	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor [[ipv4-address](#)] *ipv4-address*

Synopsis	Enter the static-neighbor list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-address] *ipv4-address*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i> mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor-unnumbered

Synopsis	Enable the static-neighbor-unnumbered context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request

or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.

Range	0 to 65535
Units	seconds
Default	14400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary

Synopsis	Enable the primary context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 primary
Tree	primary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 primary address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 primary broadcast <i>keyword</i>
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 primary tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

secondary [[address](#)] *ipv4-unicast-address*

Synopsis	Enter the secondary list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>
Tree	secondary

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**address**] *ipv4-unicast-address*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>
Tree	secondary
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> broadcast <i>keyword</i>
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> igp-inhibit <i>boolean</i>
Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure** *service ies service-name interface interface-name* **ipv4 secondary** *ipv4-unicast-address prefix-length number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis Route tag to be matched by BGP export policy rules

Context **configure** *service ies service-name interface interface-name* **ipv4 secondary** *ipv4-unicast-address tag (number | keyword)*

Tree [tag](#)

Description This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.

Range 1 to 4294967295

Options no-tag

Default no-tag

Introduced 26.3.R1

Platforms 7705 SAR Gen 2

tcp-mss *number*

Synopsis TCP maximum segment size for the interface

Context **configure** *service ies service-name interface interface-name* **ipv4 tcp-mss** *number*

Tree [tcp-mss](#)

Range 384 to 9746

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

unnumbered

Synopsis Enter the **unnumbered** context

Context **configure** **service ies** *service-name* **interface** *interface-name* **ipv4 unnumbered**

Tree **unnumbered**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-address *ipv4-unicast-address*

Synopsis IP address of the unnumbered interface

Context **configure** **service ies** *service-name* **interface** *interface-name* **ipv4 unnumbered ip-address** *ipv4-unicast-address*

Tree **ip-address**

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-int-name *interface-name*

Synopsis IP interface name

Context **configure** **service ies** *service-name* **interface** *interface-name* **ipv4 unnumbered ip-int-name** *interface-name*

Tree **ip-int-name**

String length 1 to 32

Notes The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

system

Synopsis IP interface as an unnumbered interface

Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 unnumbered system
Tree	system
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 urpf-check
Tree	urpf-check
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Options	strict – Check source address match in RT and interface loose – Check source address match in RT only strict-no-ecmp – Check source address match in ECMP route
Default	strict
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp [*virtual-router-id*] *number*

Synopsis	Enter the vrrp list instance
Context	configure <i>service</i> <i>ies</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4</i> <i>vrrp</i> <i>number</i>
Tree	<i>vrrp</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure <i>service</i> <i>ies</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4</i> <i>vrrp</i> <i>number</i>
Tree	<i>vrrp</i>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure <i>service</i> <i>ies</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4</i> <i>vrrp</i> <i>number</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Password for simple text authentication
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> authentication-key encrypted-leaf
Tree	authentication-key
Description	<p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 94
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup *ipv4-unicast-address*

Synopsis	Virtual router IP addresses for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> backup ipv4-unicast-address
Tree	backup
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The</p>

specified *unicast-ipv4-address* must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7705 SAR Gen 2 Router Configuration Guide* for more information about owner and non-owner virtual router instances.

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip ipv4-address



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number bfd-liveness dest-ip <i>ipv4-address</i>
Tree	dest-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> bfd-liveness <i>interface-name</i> <i>interface-name</i>
Tree	<i>interface-name</i>
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> bfd-liveness <i>service-name</i> <i>service-name</i>
Tree	<i>service-name</i>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> init-delay <i>number</i>
Tree	<i>init-delay</i>
Range	1 to 65535

Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac mac-unicast-address

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number mac mac-unicast-address
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

master-int-inherit boolean

Synopsis	Allow master instance to dictate the master down timer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number master-int-inherit boolean
Tree	master-int-inherit
Description	When configured to true , the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** **service ies** *service-name* **interface** *interface-name* **ipv4 vrrp** *number* **message-interval** *number*

Tree **message-interval**

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range 1 to 2559

Units deciseconds

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

monitor-oper-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group

Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner
Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> passive <i>boolean</i>
Tree	passive
Description	When configured to true , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance

does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).

When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy *reference*

Synopsis	VRRP priority control policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with</p>

the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

Reference	configure vrrp policy number
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service ies service-name interface interface-name ipv4 vrrp number preempt boolean
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Base priority for the VRRP
Context	configure service ies service-name interface interface-name ipv4 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ssh-reply *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number ssh-reply <i>boolean</i>
Tree	ssh-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number telnet-reply <i>boolean</i>
Tree	telnet-reply

Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to false , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to false , the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6
Tree	ipv6
Description	Commands in this context configure IPv6 command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [*ipv6-address*] *ipv6-address*

Synopsis	Enter the address list instance
Context	configure <i>service ies service-name</i> <i>interface interface-name</i> <i>ipv6 address ipv6-address</i>
Tree	<i>address</i>
Description	<p>This command assigns an IPv6 address/subnet to the interface.</p> <p>Up to 16 total primary and secondary IPv4 and IPv6 addresses can be assigned to network interfaces, and up to 256 to access interfaces.</p> <p>Caution: Configurations must not exceed 16 secondary IP addresses when IPsec, GRE, L2TPv3, or IP in IP protocols are active on an access interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis	IPv6 address assigned to the interface
Context	configure <i>service ies service-name</i> <i>interface interface-name</i> <i>ipv6 address ipv6-address</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	configure <i>service ies service-name</i> <i>interface interface-name</i> <i>ipv6 address ipv6-address</i> <i>duplicate-address-detection boolean</i>
Tree	<i>duplicate-address-detection</i>
Description	<p>When configured to true, the router enables Duplicate Address Detection (DAD).</p> <p>When configured to false, the router disables DAD and sets the address to preferred, even if there is a duplicated address.</p>
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

eui-64 *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> eui-64 <i>boolean</i>
Tree	eui-64
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> prefix-length <i>number</i>
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> primary-preference <i>number</i>
Tree	primary-preference

Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	<p>This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.</p>
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 bfd
Tree	bfd
Description	<p>Commands in this context configure the BFD command options for the associated IP interface.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of BFD sessions

Context **configure** **service** **ies** *service-name* **interface** *interface-name* **ipv6** **bfd** **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

echo-receive *number*

Synopsis Minimum echo interval over this interface

Context **configure** **service** **ies** *service-name* **interface** *interface-name* **ipv6** **bfd** **echo-receive** *number*

Tree **echo-receive**

Range 100 to 100000

Units milliseconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

multiplier *number*

Synopsis Number of consecutive BFD messages missed from the peer

Context **configure** **service** **ies** *service-name* **interface** *interface-name* **ipv6** **bfd** **multiplier** *number*

Tree **multiplier**

Description This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range 1 to 20

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

receive number

Synopsis	Receive interval
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 bfd receive <i>number</i>
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval number

Synopsis	Transmit interval
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Local termination point for the BFD session
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Terminate on the CPM network processor auto – Terminate on the system-selected termination point fp – Terminate on the forwarding plane
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6
Tree	dhcp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relay

Synopsis	Enter the relay context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay
Tree	relay
Description	Commands in this context configure DHCPv6 relay command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay description <i>description</i>
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lease-populate

Synopsis Enter the **lease-populate** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay lease-populate](#)

Tree [lease-populate](#)

Description Commands in this context configure the features of DHCPv6 leases on the interface.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-nbr-of-leases *number*

Synopsis Maximum lease state entries allowed for the interface

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay lease-populate max-nbr-of-leases](#) *number*

Tree [max-nbr-of-leases](#)

Range 0 to 32767

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route-populate

Synopsis Enter the **route-populate** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay lease-populate route-populate](#)

Tree [route-populate](#)

Description Commands in this context configure the route populate command options.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

na boolean

Synopsis	Create route based on the IA_NA option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate na boolean
Tree	na
Description	When configured to true , the router creates the route based on the IA_NA option in the Relay-Reply message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pd

Synopsis	Enable the pd context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate pd
Tree	pd
Description	When enabled, the router creates the route based on the IA_PD option in the Relay-Reply message.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude boolean

Synopsis	Create blackhole route based on prefix exclude option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate pd exclude boolean
Tree	exclude
Description	When configured to true , the router creates a blackhole route based on the PD_EXCLUDE option contained in the IA_PD option of the Relay-Reply message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ta boolean

Synopsis	Create route based on IA_TA option
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate ta <i>boolean</i>
Tree	ta
Description	When configured to true , the router creates the route based on the IA_TA option in the Relay-Reply message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option

Synopsis	Enter the option context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-id

Synopsis	Enter the interface-id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option interface-id
Tree	interface-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

if-index

Synopsis Use interface index in the DHCPv6 relay packet
Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay option](#) [interface-id](#) [if-index](#)
Tree [if-index](#)
Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sap-id

Synopsis Use SAP ID in interface ID option in relay packet
Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay option](#) [interface-id](#) [sap-id](#)
Tree [sap-id](#)
Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

string *string-not-all-spaces*

Synopsis String for interface ID option in DHCPv6 relay packet
Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay option](#) [interface-id](#) [string](#) *string-not-all-spaces*
Tree [string](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

remote-id *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv6-address-with-zone*

Synopsis	DHCPv6 server to which the DHCPv6 requests are forwarded
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay server ipv6-address-with-zone
Tree	server
String format	'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Max. instances	8
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address *ipv6-unicast-or-linklocal-address*

Synopsis	Source IPv6 address of the DHCPv6 relay messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay source-address <i>ipv6-unicast-or-linklocal-address</i>
Tree	source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection per interface
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward-ipv4-packets *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 forward-ipv4-packets <i>boolean</i>
Tree	forward-ipv4-packets
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp6

Synopsis	Enter the icmp6 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6
Tree	icmp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-too-big

Synopsis	Enter the packet-too-big context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

param-problem

Synopsis	Enter the param-problem context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem
Tree	param-problem
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

redirects

Synopsis Enter the **redirects** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 icmp6 redirects](#)

Tree [redirects](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of Redirect message sends

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 icmp6 redirects](#)
[admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

number *number*

Synopsis Number to limit ICMPv6 Redirect messages per time frame

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 icmp6 redirects](#)
[number](#) *number*

Tree [number](#)

Range 10 to 1000

Default 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

seconds *number*

Synopsis Time used to limit ICMPv6 Redirect messages

Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time-exceeded

Synopsis	Enter the time-exceeded context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

seconds *number*

Synopsis Time used to limit ICMPv6 Time Exceeded messages

Context **configure** *service ies service-name interface interface-name ipv6 icmp6 time-exceeded seconds number*

Tree *seconds*

Range 1 to 60

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

unreachables

Synopsis Enter the **unreachables** context

Context **configure** *service ies service-name interface interface-name ipv6 icmp6 unreachables*

Tree *unreachables*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of Unreachable message sends

Context **configure** *service ies service-name interface interface-name ipv6 icmp6 unreachables admin-state keyword*

Tree *admin-state*

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

number *number*

Synopsis Number to limit Unreachable messages per time frame

Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 unreachable number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 unreachable seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-local-address

Synopsis	Enter the link-local-address context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 link-local-address
Tree	link-local-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-address*

Synopsis	IPv6 link-local address
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 link-local-address address <i>ipv6-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 link-local-address duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD) on the interface. When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure router <i>named-item-64</i> dhcp-server dhcpv6 <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-route

Synopsis	Enter the host-route context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery host-route
Tree	host-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[route-type] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Options	static – Host routes created from EVPN ARP or ND entries dynamic – Host routes created from dynamic ARP or ND entries evpn – Host routes created from EVPN entries evpn-local-es – Host routes created from EVPN local ES entries
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>

Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery learn-unsolicited <i>keyword</i>
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit

Synopsis	Enter the limit context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit
Tree	limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only

Description	When configured to true , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to false , the router does not send the warning message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i>
Tree	local-proxy-nd
Description	<p>When configured to true, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to false, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i>
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i>
Tree	proxy-nd-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

reachable-time *number*

Synopsis Neighbor reachability detection timer

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [reachable-time](#) *number*

Tree [reachable-time](#)

Range 30 to 3600

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

stale-time *number*

Synopsis Time a Neighbor Discovery cache entry remains stale

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [stale-time](#) *number*

Tree [stale-time](#)

Range 60 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

static-neighbor [[ipv6-address](#)] *ipv6-address*

Synopsis Enter the **static-neighbor** list instance

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [static-neighbor](#) *ipv6-address*

Tree [static-neighbor](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis IPv6 address corresponding to the physical address

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [static-neighbor](#) *ipv6-address*

Tree [static-neighbor](#)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery static-neighbor ipv6-address mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 tcp-mss <i>number</i>
Tree	tcp-mss
Range	1220 to 9726
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 urpf-check
Tree	urpf-check
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 urpf-check ignore-default <i>boolean</i>

Tree	ignore-default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 urpf-check mode <i>keyword</i>
Tree	mode
Options	strict – Check source address match in RT and interface loose – Check source address match in RT only strict-no-ecmp – Check source address match in ECMP route
Default	strict
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp [[virtual-router-id](#)] *number*

Synopsis	Enter the vrrp list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i>
Tree	vrrp
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i>
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup *ipv6-address*

Synopsis	Virtual router IP addresses for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> backup <i>ipv6-address</i>
Tree	backup
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a</p>

routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7705 SAR Gen 2 Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> bfd-liveness dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number bfd-liveness <i>interface-name</i> <i>interface-name</i>
Tree	<i>interface-name</i>
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number bfd-liveness <i>service-name</i> <i>service-name</i>
Tree	<i>service-name</i>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number <i>init-delay number</i>
Tree	<i>init-delay</i>
Range	1 to 65535

Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac mac-unicast-address

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number mac mac-unicast-address
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

master-int-inherit boolean

Synopsis	Allow master instance to dictate the master down timer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number master-int-inherit boolean
Tree	master-int-inherit
Description	When configured to true , the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> message-interval <i>number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none">• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as the master.• When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.• When a non-owner is in the backup state with master-int-inherit enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.
Range	10 to 4095
Units	centiseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group

Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner
Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> passive <i>boolean</i>
Tree	passive
Description	When configured to true , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance

does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).

When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy *reference*

Synopsis	VRRP priority control policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with</p>

the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

Reference	configure vrrp policy number
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service ies service-name interface interface-name ipv6 vrrp number preempt boolean
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Base priority for the VRRP
Context	configure service ies service-name interface interface-name ipv6 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic. When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to false , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number traceroute-reply <i>boolean</i>
Tree	traceroute-reply

Description	<p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> load-balancing
Tree	load-balancing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> load-balancing ip-load-balancing <i>keyword</i>
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopback *boolean*

Synopsis	Use interface as a loopback interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> loopback <i>boolean</i>

Tree	loopback
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	MAC address for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> mac <i>mac-unicast-address</i>
Tree	mac
Description	This command assigns a specific MAC address to an IP interface.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> mac-accounting <i>boolean</i>
Tree	mac-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-chassis-shunting-profile *reference*

Synopsis	Multi-chassis shunting profile name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> multi-chassis-shunting-profile <i>reference</i>
Tree	multi-chassis-shunting-profile
Description	This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.
Reference	configure router <i>named-item-64</i> ipsec multi-chassis-shunting-profile <i>named-item</i>
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multicast-network-domain *reference*

Synopsis	Network domain name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> multicast-network-domain <i>reference</i>
Tree	multicast-network-domain
Reference	configure router <i>named-item-64</i> network-domains network-domain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ptp-hw-assist

Synopsis	Enter the ptp-hw-assist context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ptp-hw-assist
Tree	ptp-hw-assist
Description	<p>Commands in this context enable the port-based timestamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.</p> <p>Only one interface per physical port can have port-based timestamping assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the PTP timestamping assist
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i>
Tree	sap
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *sap*

Synopsis	SAP ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> accounting-policy <i>reference</i>

Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *long-description*

Synopsis Text description

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [description](#) *long-description*

Tree [description](#)

String length 1 to 160

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [dist-cpu-protection](#) *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system security](#) [dist-cpu-protection policy](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

egress

Synopsis Enter the **egress** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress](#)

Tree [egress](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

agg-rate

Synopsis Enter the **agg-rate** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress](#) [agg-rate](#)

Tree [agg-rate](#)

Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip *reference*

Synopsis	IPv4 filter policy name
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy
Tree	policer-control-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure** *service ies service-name interface interface-name sap sap egress qos*
policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation
(number | keyword)

Tree [min-thresh-separation](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance

Context **configure** *service ies service-name interface interface-name sap sap egress qos*
policer-control-policy overrides root priority-mbs-thresholds priority number

Tree [priority](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[priority-level] *number*

Synopsis Priority level

Context **configure** *service ies service-name interface interface-name sap sap egress qos*
policer-control-policy overrides root priority-mbs-thresholds priority number

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress
Tree	sap-egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides

Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	PIR percent rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (number | keyword)

Synopsis	CIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [*queue-id*] *reference*

Synopsis	Enter the queue list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] reference

Synopsis	Policer unique ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-egress <i>qos-policy-name</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir

Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Description	<p>This command configures overrides for the average frame overhead. The overrides supersede the average frame overhead configuration under the queue.</p> <p>For a full description of this command, see the configure qos network-queue queue avg-frame-overhead and configure qos sap-egress queue avg-frame-overhead contexts.</p>
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> drop-tail
Tree	drop-tail

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress port-redirect-group

Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress port-redirect-group group-name reference
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of port queue group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos](#) [scheduler-policy overrides scheduler](#) *named-item* [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

Range 0 to 6400000000

Units kilobps

Options sum, max

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis PIR at which the queue is to operate

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos](#) [scheduler-policy overrides scheduler](#) *named-item* [rate pir](#) (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Units kilobps

Options max

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos](#) [scheduler-policy](#) *policy-name* *reference*

Tree [policy-name](#)

Reference **configure** [qos scheduler-policy](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[priority-level] *number*

Synopsis	Priority level
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name

Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress
Tree	sap-ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue group instance
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress fp-redirect-group <i>instance</i> <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-ingress <i>qos-policy-name</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service ies service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir decimal-number

Synopsis	CIR percent rate
Context	configure service ies service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	PIR percent rate
Context	configure service ies service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service ies service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference rate
Tree	rate

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [\[queue-id\]](#) *reference*

Synopsis	Enter the queue list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

parent

Synopsis Enter the **parent** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides queue](#) *reference* [parent](#)

Tree [parent](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides queue](#) *reference* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides queue](#) *reference* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides queue](#) *reference* [percent-rate](#)

Tree [percent-rate](#)

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the

policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>

Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos](#) [scheduler-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos scheduler-policy](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-tunnel [[tunnel-name](#)] *interface-name*

Synopsis Enter the **ip-tunnel** list instance

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ip-tunnel](#) *interface-name*

Tree [ip-tunnel](#)

Description Commands in this context configure an IP-GRE or IP-IP tunnel and associate it with a private tunnel SAP within an IES service.

Max. instances 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[tunnel-name] *interface-name*

Synopsis IP tunnel name

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ip-tunnel](#) *interface-name*

Tree [ip-tunnel](#)

String length 1 to 32

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IP tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> backup-remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	backup-remote-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.

	When configured to false , clearing of the DF bit is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

delivery-service *service-name*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> delivery-service <i>service-name</i>
Tree	delivery-service
Description	<p>This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.</p> <p>The GRE tunnel does not come up until a valid delivery service is configured.</p>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip [**dest-ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for dest-ip
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[dest-ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote IP tunnel endpoint
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dscp *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gre-header



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the gre-header context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header
Tree	gre-header
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key
Tree	key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive number



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key receive <i>number</i>
Tree	receive
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send number



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send key of the GRE header
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key send <i>number</i>
Tree	send
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-generation



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation
Tree	icmp-generation
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required
Tree	frag-required
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the interval command.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp6-generation
Tree	icmp6-generation
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

packet-too-big

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp6-generation packet-too-big
Tree	packet-too-big
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp6-generation packet-too-big number <i>number</i>
Tree	number
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

seconds *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp6-generation packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.</p> <p>When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.</p>
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transport-mode-profile *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> ipsec-transport-mode-profile <i>reference</i>
Tree	ipsec-transport-mode-profile
Reference	configure ipsec ipsec-transport-mode-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> local-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-ip-address
Description	<p>This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).</p> <p>When this command specifies an IPv6 address, it must be a global unicast address.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pmtu-discovery-aging *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> propagate-pmtu-v6 <i>boolean</i>

Tree	propagate-pmtu-v6
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reassemble (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> reassemble (<i>number</i> <i>keyword</i>)
Tree	reassemble
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none

Introduced25.3.R2

Platforms7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisRemote IP address of the tunnel

Context**configure** **service** **ies** *service-name* **interface** *interface-name* **sap** *sap* **ip-tunnel** *interface-name* **remote-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree**remote-ip-address**

Introduced25.3.R2

Platforms7705 SAR Gen 2

ipsec-gateway [**name**] *named-item*

SynopsisEnter the **ipsec-gateway** list instance

Context**configure** **service** **ies** *service-name* **interface** *interface-name* **sap** *sap* **ipsec-gateway** *named-item*

Tree**ipsec-gateway**

Max. instances1

Introduced25.3.R2

Platforms7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

SynopsisIPsec gateway name

Context**configure** **service** **ies** *service-name* **interface** *interface-name* **sap** *sap* **ipsec-gateway** *named-item*

Tree**ipsec-gateway**

String length1 to 32

String format'string-not-all-spaces' must contain at least one non-space character

NotesThis element is part of a list key.

Introduced25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis Administrative state of the IPsec gateway

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ipsec-gateway](#) *named-item* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert

Synopsis Enter the **cert** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ipsec-gateway](#) *named-item* **cert**

Tree [cert](#)

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis Certificate profile name

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ipsec-gateway](#) *named-item* **cert** **cert-profile** *reference*

Tree [cert-profile](#)

Reference **configure** [ipsec](#) **cert-profile** *named-item*

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify

Synopsis Enter the **status-verify** context

Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> cert status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> cert status-verify primary <i>keyword</i>
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> cert status-verify secondary <i>keyword</i>

Tree	secondary
Options	none, cri, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client-db

Synopsis	Enable the client-db context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> client-db
Tree	client-db
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fallback *boolean*

Synopsis	Fall back to the default authentication policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> client-db fallback <i>boolean</i>
Tree	fallback
Description	When configured to true , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.

When configured to **false** and the client database lookup fails to return a matched result, the system fails the tunnel setup.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

name *reference*

Synopsis	Client database name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> client-db name <i>reference</i>
Tree	name
Reference	configure ipsec client-db <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-secure-service

Synopsis	Enable the default-secure-service context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> default-secure-service
Tree	default-secure-service
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interface *interface-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> default-secure-service interface <i>interface-name</i>
Tree	interface
String length	1 to 32

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

service-name *service-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> default-secure-service <i>service-name</i> <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-tunnel-template *reference*

Synopsis	Default tunnel policy template for the gateway
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> default-tunnel-template <i>reference</i>
Tree	default-tunnel-template
Reference	configure ipsec tunnel-template <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-address-assignment

Synopsis	Enter the dhcp-address-assignment context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment
Tree	dhcp-address-assignment
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcpv4

Synopsis	Enable the dhcpv4 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4
Tree	dhcpv4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gi-address ipv4-unicast-address



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 gi-address ipv4-unicast-address
Tree	gi-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

send-release *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item dhcp-address-assignment dhcpv4 send-release</i> <i>boolean</i>
Tree	send-release
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

server

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the server context
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item dhcp-address-assignment dhcpv4 server</i>
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv4-unicast-address*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item dhcp-address-assignment dhcpv4 server address</i> <i>ipv4-unicast-address</i>
Tree	address

Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vprn-loose*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 server router-instance <i>router-instance-base-vprn-loose</i>
Tree	router-instance
String length	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcpv6

Synopsis	Enable the dhcpv6 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6
Tree	dhcpv6
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

link-address *ipv6-unicast-address*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Link address of the relayed DHCPv6 packets
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 link-address <i>ipv6-unicast-address</i>
Tree	link-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

send-release *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv6 release message when IPsec tunnel removed
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 send-release <i>boolean</i>
Tree	send-release
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the server context
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 server
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv6-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 server address <i>ipv6-unicast-address</i>
Tree	address
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vprn-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 server router-instance router-instance-base-vprn-loose
Tree	router-instance
String length	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy *reference*

Synopsis	IKE policy ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> ike-policy <i>reference</i>
Tree	ike-policy
Reference	configure ipsec ike-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local

Synopsis	Enter the local context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local
Tree	local
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-assignment

Synopsis	Enable the address-assignment context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment
Tree	address-assignment
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv4 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-server *named-item***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 dhcp-server <i>named-item</i>
Tree	dhcp-server
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool *named-item***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vprn-loose***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 router-instance <i>router-instance-base-vprn-loose</i>
Tree	router-instance
String length	1 to 64
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary-pool *named-item*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 secondary-pool <i>named-item</i>
Tree	secondary-pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv6 context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-server *named-item*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv6 dhcp-server <i>named-item</i>
Tree	dhcp-server

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool *named-item*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv6 pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vprn-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv6 router-instance <i>router-instance-base-vprn-loose</i>
Tree	router-instance
String length	1 to 64
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gateway-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	gateway-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id

Synopsis	Enter the id context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id
Tree	id
Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id auto
Tree	auto
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
String length	1 to 255
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> max-history-key-records
Tree	max-history-key-records
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp number

Synopsis	Maximum number of recent records
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike number

Synopsis	Maximum number of historical IKE keys recorded
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> max-history-key-records ike <i>number</i>
Tree	ike
Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

removed-tunnels *number*

Synopsis	Maximum number of removed tunnels to record keys
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> max-history-key-records removed-tunnels <i>number</i>
Tree	removed-tunnels
Description	This command configures the maximum number of removed tunnels on the IPsec gateway for which to record IKE and ESP keys. When the number of recorded tunnels reaches the configured limit, the system removes the oldest tunnel from the history to record the newest tunnel. If this command is modified to a lower limit than the current number of recorded tunnels, the system immediately removes as many of the oldest tunnels as needed to comply with the new limit.
Range	1 to 256
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mixed-tunnel-mode**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the mixed-tunnel-mode context
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> mixed-tunnel-mode
Tree	mixed-tunnel-mode
Description	Commands in this context configure the IPsec gateway to support both remote access and dynamic LAN-to-LAN tunnels. When unconfigured, support of both tunnel types is disabled.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf*

Synopsis	Pre-shared key for the IPsec gateway
Context	configure service ies <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> pre-shared-key <i>encrypted-leaf</i>
Tree	pre-shared-key

Description	This command specifies the pre-shared key for the IPsec gateway in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

radius

Synopsis	Enter the radius context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> radius
Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

accounting-policy reference

Synopsis	RADIUS accounting policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> radius accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure ipsec radius accounting-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-policy reference

Synopsis	RADIUS authentication policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> radius authentication-policy <i>reference</i>
Tree	authentication-policy
Reference	configure ipsec radius authentication-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> ts-list <i>reference</i>
Tree	ts-list
Reference	configure ipsec ts-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lag

Synopsis	Enter the lag context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
Max. instances	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis SDP binding ID

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id*

Tree [spoke-sdp](#)

String length 3 to 16

String format 'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

accounting-policy *reference*

Synopsis Policy to collect accounting statistics

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [accounting-policy](#) *reference*

Tree [accounting-policy](#)

Reference **configure** [log accounting-policy](#) *number*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter
Tree	filter

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue-group instance ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group <i>instance number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label

Synopsis	Enable the hash-label context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the <i>7705 SAR Gen 2 MPLS Guide</i> .
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter

Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual circuit type associated with the SDP binding
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> vc-type <i>keyword</i>
Tree	vc-type
Options	ether – Ethernet pseudowire associated with SDP binding ipipe – Ipipe pseudowire associated with SDP binding
Default	ether
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

static-tunnel-redundant-nexthop *ipv4-unicast-address*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> static-tunnel-redundant-nexthop <i>ipv4-unicast-address</i>
Tree	static-tunnel-redundant-nexthop
Description	<p>This command configures a redundant next-hop address on a public or private IPsec interface (with a public or private tunnel SAP) for a static IPsec tunnel in 1:1 MC-IPsec. A standby node uses the specified next-hop address to shunt traffic to the master in case it receives traffic destined to a tunnel endpoint address. The standby tunnel group needs to be operationally up for the feature to work.</p> <p>The next-hop address is resolved in the routing table of the corresponding service.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop) .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Options	trusted, untrusted
Default	untrusted
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> tunnel <i>boolean</i>
Tree	tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vas-if-type *keyword*

Synopsis	VAS interface type
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vas-if-type <i>keyword</i>
Tree	vas-if-type
Options	to-from-access, to-from-network, to-from-both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpls [**vpls-name**] *named-item-64*

Synopsis	Enter the vpls list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i>
Tree	vpls
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[vpls-name] *named-item-64*

Synopsis	VPLS service
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i>
Tree	vpls
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reclassify-using-qos *reference*

Synopsis	Egress QoS policy
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress reclassify-using-qos <i>reference</i>
Tree	reclassify-using-qos
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

routed-override-filter

Synopsis	Enter the routed-override-filter context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress routed-override-filter
Tree	routed-override-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress routed-override-filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [egress routed-override-filter](#) [ipv6](#) *reference*

Tree [ipv6](#)

Reference **configure** [filter](#) [ipv6-filter](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

evpn

Synopsis Enter the **evpn** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [evpn](#)

Tree [evpn](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

arp

Synopsis Enter the **arp** context

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [evpn](#) [arp](#)

Tree [arp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise [[route-type](#)] *keyword*

Synopsis Enter the **advertise** list instance

Context **configure** [service ies](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [evpn](#) [arp](#) **advertise** *keyword*

Tree [advertise](#)

Description Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.

The **learn-dynamic** command must be set to **false** when using this functionality.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[route-type] keyword

Synopsis Type of ARP or ND entries that generate host routes
Context **configure** [service ies](#) [service-name](#) [interface](#) [interface-name](#) [vpls](#) [named-item-64](#) [evpn](#) [arp](#) [advertise](#) [keyword](#)
Tree [advertise](#)
Description This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options static, dynamic, evpn-local-es
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

route-tag number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry
Context **configure** [service ies](#) [service-name](#) [interface](#) [interface-name](#) [vpls](#) [named-item-64](#) [evpn](#) [arp](#) [advertise](#) [keyword](#) [route-tag](#) [number](#)
Tree [route-tag](#)
Description This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range 0 to 255
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

evpn-local-es

Synopsis Enter the **evpn-local-es** context

Context	configure <i>service</i> <i>ies</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>vpls</i> <i>named-item-64</i> <i>evpn</i> <i>arp evpn-local-es</i>
Tree	<i>evpn-local-es</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

entry-type *keyword*

Synopsis	Type of EVPN entry
Context	configure <i>service</i> <i>ies</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>vpls</i> <i>named-item-64</i> <i>evpn</i> <i>arp evpn-local-es entry-type keyword</i>
Tree	<i>entry-type</i>
Description	This command configures the type of EVPN entry. When configured to evpn , received EVPN MAC/IP advertisement routes matching a local ESI to create an ARP or ND route of type EVPN are enabled. When configured to evpn-local-es , ARP or ND entries are classified as the EVPN local ES type. The EVPN local ES ARP or ND entries then trigger the local router to advertise corresponding MAC/IP advertisement routes with the proxy bit set if the advertise evpn-local-es command is configured.
Options	evpn – Allow EVPN routes to be advertised evpn-local-es – Allow EVPN local ES routes to be advertised
Default	evpn
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Retention timer of the entry
Context	configure <i>service</i> <i>ies</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>vpls</i> <i>named-item-64</i> <i>evpn</i> <i>arp evpn-local-es retention-timer number</i>
Tree	<i>retention-timer</i>
Description	The timer defines how long the EVPN local ES entry is retained. While the timer is active, the router sends ARP requests or neighbor solicitations for the entry to the local ES. If a response is received, the entry is converted into a dynamic entry. The command can only be set to a value different from 0 if the entry type is configured as EVPN local ES.
Range	0 to 65535
Units	seconds

Default	0
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

flood-garp-and-unknown-req *boolean*

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp flood-garp-and-unknown-req <i>boolean</i>
Tree	flood-garp-and-unknown-req
Description	When configured to true , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to false , CPM-originated ARP flooding is suppressed.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Description	When configured to true , the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to false , learning is disabled and table entries are not created for these messages.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nd

Synopsis	Enter the nd context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd

Tree	nd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise [\[route-type\]](#) *keyword*

Synopsis	Enter the advertise list instance
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[route-type] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic, evpn-local-es
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
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Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-local-es

Synopsis	Enter the evpn-local-es context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd evpn-local-es
Tree	evpn-local-es
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

entry-type *keyword*

Synopsis	Type of EVPN entry
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd evpn-local-es entry-type <i>keyword</i>
Tree	entry-type
Description	<p>This command configures the type of EVPN entry.</p> <p>When configured to evpn, received EVPN MAC/IP advertisement routes matching a local ESI to create an ARP or ND route of type EVPN are enabled.</p> <p>When configured to evpn-local-es, ARP or ND entries are classified as the EVPN local ES type. The EVPN local ES ARP or ND entries then trigger the local router to advertise corresponding MAC/IP advertisement routes with the proxy bit set if the advertise evpn-local-es command is configured.</p>
Options	evpn – Allow EVPN routes to be advertised evpn-local-es – Allow EVPN local ES routes to be advertised
Default	evpn
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Retention timer of the entry
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd evpn-local-es retention-timer <i>number</i>
Tree	retention-timer
Description	<p>The timer defines how long the EVPN local ES entry is retained. While the timer is active, the router sends ARP requests or neighbor solicitations for the entry to the local ES. If a response is received, the entry is converted into a dynamic entry.</p> <p>The command can only be set to a value different from 0 if the entry type is configured as EVPN local ES.</p>
Range	0 to 65535
Units	seconds
Default	0
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Description	<p>When configured to true, the system processes ARP or ND messages that arrive on EVPN tunnels.</p> <p>When configured to false, learning is disabled and table entries are not created for these messages.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> ingress
Tree	ingress

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

routed-override-filter

Synopsis	Enter the routed-override-filter context
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> ingress routed-override-filter
Tree	routed-override-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> ingress routed-override-filter ip <i>reference</i>
Tree	ip
Description	<p>This command specifies an IP filter that is applied to routed unicast ingress packets entering the VPLS service and destined to the R-VPLS interface MAC address.</p> <p>The filter overrides any existing ingress IP filter applied to SAPs or SDP bindings for packets associated with the routing IP interface. The override filter is optional and when it is not defined or it is removed, the IP routed packets use the existing ingress IP filter configured on the VPLS endpoint.</p>
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service ies <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> ingress routed-override-filter ipv6 <i>reference</i>
Tree	ipv6
Description	<p>This command specifies an IPv6 filter that is applied to routed unicast ingress packets entering the VPLS service and destined to the R-VPLS interface MAC address.</p> <p>The filter overrides any existing ingress IP filter applied to SAPs or SDP bindings for packets associated with the routing IP interface. The override filter is optional and when</p>

	it is not defined or it is removed, the IP routed packets use the existing ingress IP filter configured on the VPLS endpoint.
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-transport [\[ipt-id\]](#) *port*

Synopsis	Enter the ip-transport list instance
Context	configure service ies <i>service-name</i> ip-transport <i>port</i>
Tree	ip-transport
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ipt-id] *port*

Synopsis	IP Transport identifier.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i>
Tree	ip-transport
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the IP transport.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Description for the IP transport.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

dscp-name *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	dscp name
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> dscp-name <i>keyword</i>
Tree	dscp-name
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	ef
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

filter-unknown-host *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/Disable unknown host filtering.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> filter-unknown-host <i>boolean</i>
Tree	filter-unknown-host
Default	false

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

local-host

Synopsis	Enter the local-host context
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> local-host
Tree	local-host
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ip-address *ipv4-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address used for this local host.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> local-host ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port-num *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP/UDP port number.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> local-host port-num <i>number</i>
Tree	port-num
Range	1026 to 49150
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

protocol *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Protocol used.

Context **configure** *service ies* *service-name ip-transport* *port local-host* **protocol** *keyword*

Tree *protocol*

Options tcp, udp

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-host [*remote-host-id*] *number*

Synopsis Enter the **remote-host** list instance

Context **configure** *service ies* *service-name ip-transport* *port remote-host* *number*

Tree *remote-host*

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[remote-host-id] *number*

Synopsis remote host identifier

Context **configure** *service ies* *service-name ip-transport* *port remote-host* *number*

Tree *remote-host*

Range 1 to 2147483647

Notes This element is part of a list key.

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis User provided description for the remote host.

Context	configure service ies <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ip-address *ipv4-unicast-address*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address used for this remote host.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i> ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port-num *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TCP/UDP port number.
Context	configure service ies <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i> port-num <i>number</i>
Tree	port-num
Range	1 to 65535
Notes	This element is mandatory.
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-host-name *string*

Synopsis User provided name for the remote host.

Context **configure** *service ies* *service-name ip-transport* *port remote-host* *number remote-host-name* *string*

Tree *remote-host-name*

String length 1 to 64

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tcp

Synopsis Enter the **tcp** context

Context **configure** *service ies* *service-name ip-transport* *port tcp*

Tree *tcp*

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

inactivity-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Length of time to wait before disconnecting an inactive TCP connection.

Context **configure** *service ies* *service-name ip-transport* *port tcp* *inactivity-timeout* *number*

Tree *inactivity-timeout*

Range 1 to 65535

Units seconds

Default 30

Introduced 26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

max-retries *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of max retries.
Context	configure <i>service ies service-name ip-transport port tcp max-retries number</i>
Tree	<i>max-retries</i>
Range	0 to 10
Default	5
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

retry-interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Length of time to wait before a TCP retry.
Context	configure <i>service ies service-name ip-transport port tcp retry-interval number</i>
Tree	<i>retry-interval</i>
Range	0 to 300
Units	seconds
Default	5
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

service-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure <i>service ies service-name service-id number</i>

Tree	service-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure service ies <i>service-name</i> vpn-id <i>number</i>
Tree	vpn-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-list [[name](#)] *named-item*

Synopsis	Enter the mac-list list instance
Context	configure service mac-list <i>named-item</i>
Tree	mac-list
Description	Commands in this context specify the MAC addresses to be included in a MAC list to be used with the Auto-Learn MAC Protect (ALMP) functionality. The list is used to exclude certain MAC addresses from protection, for example, on SAPs or spoke SDPs configured with ALMP where certain MAC addresses (such as VRRP virtual MAC addresses) must be able to move to other objects.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	MAC list name
Context	configure service mac-list <i>named-item</i>
Tree	mac-list
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service mac-list <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [[address](#)] *mac-address*

Synopsis	Enter the mac list instance
Context	configure service mac-list <i>named-item</i> mac <i>mac-address</i>
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *mac-address*

Synopsis	MAC address
Context	configure service mac-list <i>named-item</i> mac <i>mac-address</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *mac-address*

Synopsis	Mask for the MAC address
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Context	configure service mac-list <i>named-item</i> mac <i>mac-address</i> mask <i>mac-address</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure service md-auto-id
Tree	md-auto-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

customer-id-range

Synopsis	Enable the customer-id-range context
Context	configure service md-auto-id customer-id-range
Tree	customer-id-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	configure service md-auto-id customer-id-range end <i>number</i>
Tree	end
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	configure service md-auto-id customer-id-range start <i>number</i>
Tree	start
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-template-id-range

Synopsis	Enable the pw-template-id-range context
Context	configure service md-auto-id pw-template-id-range
Tree	pw-template-id-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the PW template ID range
Context	configure service md-auto-id pw-template-id-range end <i>number</i>
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the PW template ID range
Context	configure service md-auto-id pw-template-id-range start <i>number</i>
Tree	start
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id-range

Synopsis	Enable the service-id-range context
Context	configure service md-auto-id service-id-range
Tree	service-id-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the service ID range
Context	configure service md-auto-id service-id-range end <i>number</i>
Tree	end
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the service ID range
Context	configure service md-auto-id service-id-range start number
Tree	start
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat

Synopsis	Enter the nat context
Context	configure service nat
Tree	nat
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-nat-policy [[name](#)] *external-named-item*

Synopsis	Enter the cpm-nat-policy list instance
Context	configure service nat cpm-nat-policy external-named-item
Tree	cpm-nat-policy
Description	Commands in this context configure CPM NAT policies.
Max. instances	64
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *external-named-item*

Synopsis	CPM NAT policy name
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Context	configure service nat cpm-nat-policy <i>external-named-item</i>
Tree	cpm-nat-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

alg

Synopsis	Enter the alg context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> alg
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ftp *boolean*

Synopsis	Use FTP ALG for the policy
Context	configure service nat cpm-nat-policy <i>external-named-item</i> alg ftp <i>boolean</i>
Tree	ftp
Default	true
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure service nat cpm-nat-policy <i>external-named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

filtering *keyword*

Synopsis Filtering method for inbound traffic for the policy

Context **configure** [service nat cpm-nat-policy](#) *external-named-item* [filtering](#) *keyword*

Tree [filtering](#)

Options endpoint-independent, address-and-port-dependent

Default endpoint-independent

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-limits

Synopsis Enter the **port-limits** context

Context **configure** [service nat cpm-nat-policy](#) *external-named-item* [port-limits](#)

Tree [port-limits](#)

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic-ports *number*

Synopsis Maximum number of dynamic ports per subscriber

Context **configure** [service nat cpm-nat-policy](#) *external-named-item* [port-limits](#) [dynamic-ports](#) *number*

Tree [dynamic-ports](#)

Description This command limits the number of ports per protocol on an outside IP address for a subscriber regardless of the pool pairing mode. This command applies to LSN44 pools with flexible port allocation.

Range 1 to 65536

Default 65536

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

forwarding number

Synopsis	Maximum number of port forwarding entries
Context	configure service nat cpm-nat-policy <i>external-named-item</i> port-limits forwarding number
Tree	forwarding
Range	1 to 65535
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> port-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

high number

Synopsis	High watermark percentage
Context	configure service nat cpm-nat-policy <i>external-named-item</i> port-limits watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

low number

Synopsis	Low watermark percentage
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Context	configure service nat cpm-nat-policy <i>external-named-item</i> port-limits watermarks low <i>number</i>
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

session-limits

Synopsis	Enter the session-limits context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max *number*

Synopsis	Maximum number of sessions per subscriber
Context	configure service nat cpm-nat-policy <i>external-named-item</i> session-limits max <i>number</i>
Tree	max
Range	1 to 65535
Default	100
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> session-limits watermarks
Tree	watermarks

Description	This command configures watermarks for NAT resources.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

high number

Synopsis	High watermark percentage
Context	configure service nat cpm-nat-policy <i>external-named-item</i> session-limits watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

low number

Synopsis	Low watermark percentage
Context	configure service nat cpm-nat-policy <i>external-named-item</i> session-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tcp

Synopsis	Enter the tcp context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> tcp

Tree	tcp
Description	Commands in this context configure the Transmission Control Protocol (TCP) attributes of the policy.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mss-adjust *number*

Synopsis	TCP MSS adjustment value
Context	configure service nat cpm-nat-policy <i>external-named-item</i> tcp mss-adjust <i>number</i>
Tree	mss-adjust
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

timeouts

Synopsis	Enter the timeouts context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts
Tree	timeouts
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-query *number*

Synopsis	Timeout applied to an ICMP Query session
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts icmp-query <i>number</i>
Tree	icmp-query
Range	60 to 240
Units	seconds
Default	60
Introduced	25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tcp

Synopsis Enter the **tcp** context

Context **configure** [service nat cpm-nat-policy](#) *external-named-item* [timeouts tcp](#)

Tree [tcp](#)

Description Commands in this context configure TCP timeout attributes.

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

established *number*

Synopsis Idle timeout for TCP session in established state

Context **configure** [service nat cpm-nat-policy](#) *external-named-item* [timeouts tcp established](#) *number*

Tree [established](#)

Range 60 to 86400

Units seconds

Default 7440

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

syn *number*

Synopsis TCP session timeout when synchronizing initial sequence

Context **configure** [service nat cpm-nat-policy](#) *external-named-item* [timeouts tcp syn](#) *number*

Tree [syn](#)

Range 6 to 86400

Units seconds

Default 15

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

time-wait *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts tcp time-wait number
Tree	time-wait
Range	0 to 240
Units	seconds
Default	0
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

transitory *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts tcp transitory number
Tree	transitory
Range	60 to 86400
Units	seconds
Default	240
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

udp

Synopsis	Enter the udp context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dns number

Synopsis	Timeout applied to UDP session with destination port 53
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts udp dns number
Tree	dns
Range	15 to 86400
Units	seconds
Default	15
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

initial number

Synopsis	UDP mapping timeout applied to new sessions
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts udp initial number
Tree	initial
Range	10 to 300
Units	seconds
Default	15
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

normal number

Synopsis	UDP mapping timeout
Context	configure service nat cpm-nat-policy <i>external-named-item</i> timeouts udp normal number
Tree	normal
Range	60 to 86400
Units	seconds
Default	300
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

udp

Synopsis	Enter the udp context
Context	configure service nat cpm-nat-policy <i>external-named-item</i> udp
Tree	udp
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	configure service nat cpm-nat-policy <i>external-named-item</i> udp inbound-refresh <i>boolean</i>
Tree	inbound-refresh
Description	When configured to true , the router extends the UDP session timeout on inbound traffic. When configured to false , the router does not extend the UDP session timeout.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy [[name](#)] *external-named-item*

Synopsis	Enter the nat-policy list instance
Context	configure service nat nat-policy <i>external-named-item</i>
Tree	nat-policy
Max. instances	4096
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[[name](#)] *external-named-item*

Synopsis	NAT policy name
Context	configure service nat nat-policy <i>external-named-item</i>
Tree	nat-policy
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

alg

Synopsis	Enter the alg context
Context	configure service nat nat-policy external-named-item alg
Tree	alg
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ftp boolean

Synopsis	Use FTP ALG for the policy
Context	configure service nat nat-policy external-named-item alg ftp boolean
Tree	ftp
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pptp boolean

Synopsis	Use PPTP ALG for the policy
Context	configure service nat nat-policy external-named-item alg pptp boolean
Tree	pptp
Description	<p>When configured to true, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.</p> <p>PPTP sessions can only be initiated from NAT inside.</p> <p>GRE traffic is allowed through NAT only if the corresponding mapping exists.</p> <p>There can be seven calls (GRE tunnels) per control session.</p> <p>When configured to false, PPTP ALG is not used.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

rtsp boolean

Synopsis	Use RTSP ALG for the policy
Context	configure service nat nat-policy <i>external-named-item</i> alg rtsp <i>boolean</i>
Tree	rtsp
Description	When configured to true , Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

sip boolean

Synopsis	Use SIP ALG for the policy
Context	configure service nat nat-policy <i>external-named-item</i> alg sip <i>boolean</i>
Tree	sip
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

block-limit number

Synopsis	Maximum number of port blocks per subscriber
Context	configure service nat nat-policy <i>external-named-item</i> block-limit <i>number</i>
Tree	block-limit
Range	1 to 40
Default	1
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure service nat nat-policy <i>external-named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

filtering *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	configure service nat nat-policy <i>external-named-item</i> filtering <i>keyword</i>
Tree	filtering
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool

Synopsis	Enter the pool context
Context	configure service nat nat-policy <i>external-named-item</i> pool
Tree	pool
Notes	The following elements are part of a choice: dnat-only , l2-outside , or pool .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

name *named-item***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT pool name
----------	---------------

Context	configure service nat nat-policy <i>external-named-item</i> pool name <i>named-item</i>
Tree	name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router or VPRN service name
Context	configure service nat nat-policy <i>external-named-item</i> pool router-instance <i>string</i>
Tree	router-instance
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-limits

Synopsis	Enter the port-limits context
Context	configure service nat nat-policy <i>external-named-item</i> port-limits
Tree	port-limits
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic-ports *number*

Synopsis	Maximum number of dynamic ports per subscriber
Context	configure service nat nat-policy <i>external-named-item</i> port-limits dynamic-ports <i>number</i>
Tree	dynamic-ports
Description	This command limits the number of ports per protocol on an outside IP address for a subscriber regardless of the pool pairing mode. This command applies to LSN44 pools with flexible port allocation.
Range	1 to 65536
Default	65536

Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

forwarding *number*

Synopsis	Maximum number of port forwarding entries
Context	configure service nat nat-policy external-named-item port-limits forwarding <i>number</i>
Tree	forwarding
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat nat-policy external-named-item port-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

high *number*

Synopsis	High watermark percentage
Context	configure service nat nat-policy external-named-item port-limits watermarks high <i>number</i>
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

low number

Synopsis	Low watermark percentage
Context	configure service nat nat-policy external-named-item port-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

session-limits

Synopsis	Enter the session-limits context
Context	configure service nat nat-policy external-named-item session-limits
Tree	session-limits
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max number

Synopsis	Maximum number of sessions per subscriber
Context	configure service nat nat-policy external-named-item session-limits max number
Tree	max
Range	1 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

watermarks

Synopsis	Enable the watermarks context
Context	configure service nat nat-policy <i>external-named-item</i> session-limits watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

high number

Synopsis	High watermark percentage
Context	configure service nat nat-policy <i>external-named-item</i> session-limits watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

low number

Synopsis	Low watermark percentage
Context	configure service nat nat-policy <i>external-named-item</i> session-limits watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tcp

Synopsis Enter the **tcp** context

Context **configure** [service nat nat-policy external-named-item tcp](#)

Tree [tcp](#)

Description Commands in this context configure the Transmission Control Protocol (TCP) attributes of the policy.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mss-adjust *number*

Synopsis TCP MSS adjustment value

Context **configure** [service nat nat-policy external-named-item tcp mss-adjust number](#)

Tree [mss-adjust](#)

Description This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.

Range 160 to 10240

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

timeouts

Synopsis Enter the **timeouts** context

Context **configure** [service nat nat-policy external-named-item timeouts](#)

Tree [timeouts](#)

Description Commands in this context configure the attributes of session idle timeouts for the policy.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-query *number*

Synopsis Timeout applied to an ICMP Query session

Context **configure** [service nat nat-policy external-named-item timeouts icmp-query number](#)

Tree	icmp-query
Range	60 to 240
Units	seconds
Default	60
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tcp

Synopsis	Enter the tcp context
Context	configure service nat nat-policy external-named-item timeouts tcp
Tree	tcp
Description	Commands in this context configure TCP timeout attributes.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

established *number*

Synopsis	Idle timeout for TCP session in established state
Context	configure service nat nat-policy external-named-item timeouts tcp established number
Tree	established
Range	60 to 86400
Units	seconds
Default	7440
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

syn *number*

Synopsis	TCP session timeout when synchronizing initial sequence
Context	configure service nat nat-policy external-named-item timeouts tcp syn number
Tree	syn
Range	6 to 86400
Units	seconds

Default	15
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

time-wait *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	configure service nat nat-policy <i>external-named-item</i> timeouts tcp time-wait <i>number</i>
Tree	time-wait
Range	0 to 240
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

transitory *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	configure service nat nat-policy <i>external-named-item</i> timeouts tcp transitory <i>number</i>
Tree	transitory
Range	60 to 86400
Units	seconds
Default	240
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

udp

Synopsis	Enter the udp context
Context	configure service nat nat-policy <i>external-named-item</i> timeouts udp
Tree	udp
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dns number

Synopsis	Timeout applied to UDP session with destination port 53
Context	configure service nat nat-policy <i>external-named-item</i> timeouts udp dns number
Tree	dns
Range	15 to 86400
Units	seconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

initial number

Synopsis	UDP mapping timeout applied to new sessions
Context	configure service nat nat-policy <i>external-named-item</i> timeouts udp initial number
Tree	initial
Range	10 to 300
Units	seconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

normal number

Synopsis	UDP mapping timeout
Context	configure service nat nat-policy <i>external-named-item</i> timeouts udp normal number
Tree	normal
Range	60 to 86400
Units	seconds
Default	300
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

udp

Synopsis	Enter the udp context
Context	configure service nat nat-policy external-named-item udp
Tree	udp
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	configure service nat nat-policy external-named-item udp inbound-refresh <i>boolean</i>
Tree	inbound-refresh
Description	When configured to true , the router extends the UDP session timeout on inbound traffic. When configured to false , the router does not extend the UDP session timeout.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

oper-group [[name](#)] *named-item*

Synopsis	Enter the oper-group list instance
Context	configure service oper-group <i>named-item</i>
Tree	oper-group
Max. instances	32768
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[name](#)] *named-item*

Synopsis	Operational group name
Context	configure service oper-group <i>named-item</i>
Tree	oper-group
String length	1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service oper-group <i>named-item</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip *ipv4-unicast-address*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for BFD
Context	configure service oper-group <i>named-item</i> bfd-liveness dest-ip <i>ipv4-unicast-address</i>
Tree	dest-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source interface name
Context	configure service oper-group <i>named-item</i> bfd-liveness interface-name <i>interface-name</i>
Tree	interface-name

String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context used for route lookup
Context	configure service oper-group <i>named-item</i> bfd-liveness router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure service oper-group <i>named-item</i> hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down *number*

Synopsis	Oper group hold down time
Context	configure service oper-group <i>named-item</i> hold-time down <i>number</i>
Tree	down
Range	1 to 3600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up *number*

Synopsis	Oper group hold up time
Context	configure service oper-group <i>named-item</i> hold-time up <i>number</i>
Tree	up
Range	0 to 3600
Units	seconds
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-arp-nd

Synopsis	Enter the proxy-arp-nd context
Context	configure service proxy-arp-nd
Tree	proxy-arp-nd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-list

Synopsis	Enter the mac-list context
Context	configure service proxy-arp-nd mac-list
Tree	mac-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

list [[list-name](#)] *named-item*

Synopsis	Enter the list list instance
Context	configure service proxy-arp-nd mac-list list <i>named-item</i>
Tree	list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[list-name] *named-item*

Synopsis	Specify name for mac list
Context	configure service proxy-arp-nd mac-list list <i>named-item</i>
Tree	list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [[address](#)] *mac-unicast-address-no-zero*

Synopsis	Add a list entry for mac
Context	configure service proxy-arp-nd mac-list list <i>named-item</i> mac <i>mac-unicast-address-no-zero</i>
Tree	mac
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *mac-unicast-address-no-zero*

Synopsis	MAC address to be added to the list
Context	configure service proxy-arp-nd mac-list list <i>named-item</i> mac <i>mac-unicast-address-no-zero</i>
Tree	mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-template [[pw-template-name](#)] *pw-template-name*

Synopsis	Enter the pw-template list instance
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Context	configure service pw-template <i>pw-template-name</i>
Tree	pw-template
Max. instances	2048
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pw-template-name] *pw-template-name*

Synopsis	SDP template name
Context	configure service pw-template <i>pw-template-name</i>
Tree	pw-template
String length	1 to 64
String format	'pw-template-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *number*

Synopsis	Accounting policy
Context	configure service pw-template <i>pw-template-name</i> accounting-policy <i>number</i>
Tree	accounting-policy
Range	1 to 99
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-fragmentation *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	configure service pw-template <i>pw-template-name</i> allow-fragmentation <i>boolean</i>
Tree	allow-fragmentation
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-gre-sdp *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use a GRE tunnel to automatically create an SDP
Context	configure service pw-template <i>pw-template-name</i> auto-gre-sdp <i>boolean</i>
Tree	auto-gre-sdp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-on-peer-fault *boolean*

Synopsis	Enable block traffic on peer fault
Context	configure service pw-template <i>pw-template-name</i> block-on-peer-fault <i>boolean</i>
Tree	block-on-peer-fault
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure service pw-template <i>pw-template-name</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*

Synopsis	Enable/Disable the use of ControlWord
Context	configure service pw-template <i>pw-template-name</i> control-word <i>boolean</i>
Tree	control-word

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service pw-template <i>pw-template-name</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service pw-template <i>pw-template-name</i> egress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip named-item-64

Synopsis	IPv4 filter policy name
Context	configure service pw-template <i>pw-template-name</i> egress filter ip <i>named-item-64</i>
Tree	ip
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 named-item-64

Synopsis	IPv6 filter policy name
Context	configure service pw-template <i>pw-template-name</i> egress filter ipv6 <i>named-item-64</i>
Tree	ipv6

String length 1 to 64
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mac *named-item-64*

Synopsis MAC filter policy name
Context **configure** [service](#) [pw-template](#) *pw-template-name* [egress filter mac](#) *named-item-64*
Tree [mac](#)
String length 1 to 64
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mfib-allowed-mda-destinations

Synopsis Enter the **mfib-allowed-mda-destinations** context
Context **configure** [service](#) [pw-template](#) *pw-template-name* [egress mfib-allowed-mda-destinations](#)
Tree [mfib-allowed-mda-destinations](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mda [[mda-id](#)] *slot-mda*

Synopsis Add a list entry for **mda**
Context **configure** [service](#) [pw-template](#) *pw-template-name* [egress mfib-allowed-mda-destinations](#) [mda](#) *slot-mda*
Tree [mda](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[[mda-id](#)] *slot-mda*

Synopsis MFIB allowed MDA destination

Context	configure service pw-template <i>pw-template-name</i> egress mfib-allowed-mda-destinations mda <i>slot-mda</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service pw-template <i>pw-template-name</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service pw-template <i>pw-template-name</i> egress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *named-item-64*

Synopsis	Network policy ID
Context	configure service pw-template <i>pw-template-name</i> egress qos network policy-name <i>named-item-64</i>
Tree	policy-name
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service pw-template <i>pw-template-name</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *named-item*

Synopsis	Name of the egress port queue group template
Context	configure service pw-template <i>pw-template-name</i> egress qos network port-redirect-group group-name <i>named-item</i>
Tree	group-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance for FP ingress queue group
Context	configure service pw-template <i>pw-template-name</i> egress qos network port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

encryption-keygroup

Synopsis	Enter the encryption-keygroup context
Context	configure service pw-template <i>pw-template-name</i> encryption-keygroup
Tree	encryption-keygroup
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

inbound number

Synopsis Keygroup identifier in the inbound direction

Context **configure** [service pw-template pw-template-name encryption-keygroup inbound number](#)

Tree [inbound](#)

Range 1 to 127

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

outbound number

Synopsis Keygroup identifier in the outbound direction

Context **configure** [service pw-template pw-template-name encryption-keygroup outbound number](#)

Tree [outbound](#)

Range 1 to 127

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

entropy-label

Synopsis Enable the use of an entropy label

Context **configure** [service pw-template pw-template-name entropy-label](#)

Tree [entropy-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fdb

Synopsis Enter the **fdb** context

Context **configure** [service pw-template pw-template-name fdb](#)

Tree [fdb](#)

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis Enable automatic update of MAC protect list
 Context **configure** [service](#) [pw-template](#) *pw-template-name* [fdb](#) [auto-learn-mac-protect](#) *boolean*
 Tree [auto-learn-mac-protect](#)
 Default false
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

auto-learn-mac-protect-exclude-list *named-item*

Synopsis Name of the MAC protect exclusion list
 Context **configure** [service](#) [pw-template](#) *pw-template-name* [fdb](#) [auto-learn-mac-protect-exclude-list](#) *named-item*
 Tree [auto-learn-mac-protect-exclude-list](#)
 Description This command configures the name of a MAC protect exclusion list.
 Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.
 An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
 String length 1 to 32
 String format 'string-not-all-spaces' must contain at least one non-space character
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

discard-unknown-source *boolean*

Synopsis Discard frames with unknown source
 Context **configure** [service](#) [pw-template](#) *pw-template-name* [fdb](#) [discard-unknown-source](#) *boolean*
 Tree [discard-unknown-source](#)
 Default false
 Introduced 25.3.R2

Platforms 7705 SAR Gen 2

limit-mac-move *keyword*

Synopsis MAC move limit

Context **configure** [service pw-template pw-template-name fdb limit-mac-move keyword](#)

Tree [limit-mac-move](#)

Options blockable, non-blockable

Default blockable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mac-learning

Synopsis Enter the **mac-learning** context

Context **configure** [service pw-template pw-template-name fdb mac-learning](#)

Tree [mac-learning](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

aging *boolean*

Synopsis Enable aging of MAC addresses

Context **configure** [service pw-template pw-template-name fdb mac-learning aging boolean](#)

Tree [aging](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

learning *boolean*

Synopsis Enable learning of new MAC addresses

Context **configure** [service pw-template pw-template-name fdb mac-learning learning boolean](#)

Tree [learning](#)

Default true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-pinning *boolean*

Synopsis	Enable MAC address pinning on this spoke SDP
Context	configure service pw-template <i>pw-template-name</i> fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	configure service pw-template <i>pw-template-name</i> fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this PW template.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> <p>When the configured limit is reached and the configure service pw-template fdb discard-unknown-source command is set to true for this PW template, packets with unknown source MAC addresses are discarded. If discard-unknown-source is set to false, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p> <p>However, if the configure service vpls fdb discard-unknown command is set to true, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.</p> <p>When unconfigured, the PW template uses the global MAC learning limitations.</p>
Range	1 to 511999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Action taken after a relearn request for protected MAC
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Context	configure service pw-template <i>pw-template-name</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Description	This command configures how the system handles relearn requests for protected MAC addresses.
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-vc-forwarding *keyword*

Synopsis	VLAN tag processing action
Context	configure service pw-template <i>pw-template-name</i> force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Description	<p>This command configures the VLAN tag processing used on the service.</p> <p>The vlan option configures the router to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag, which is sent in the customer frame to the EVPN destinations.</p> <p>The qinq-c-tag-c-tag option configures the router to pushes two tags with the same value derived from the inner service delimiting tag. At network ingress, two VLAN tags are extracted at most and the C-tag and S-tag p/de bits are propagated to the egress SAPs.</p> <p>The qinq-s-tag-c-tag option configures the router to push two tags that are copied from the QinQ service-delimiting VLAN values and may be different. At network ingress, two VLAN tags are extracted at most and the p/de bits are propagated to the egress SAP service-delimiting S-tag and C-tag respectively.</p>
Options	vlan – Push VLAN ID and 802.1p bits of service-delimiting qtag qinq-c-tag-c-tag – Push two tags identical to inner service-delimiting tag qinq-s-tag-c-tag – Push two tags based on QinQ service-delimiting values
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label

Synopsis	Enable the hash-label context
Context	configure service pw-template <i>pw-template-name</i> hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths.

For information about hash-label handling, see the "Hash labels" section of the *7705 SAR Gen 2 MPLS Guide*.

Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	configure service pw-template pw-template-name hash-label signal-capability
Tree	signal-capability
Description	<p>When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.</p> <p>The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration. The node must withdraw the label it sent to its peer and send a new label mapping message with the new value of the F-bit in the flow label interface option sub-TLV of the pseudowire ID FEC element.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service pw-template pw-template-name igmp-snooping
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service pw-template pw-template-name igmp-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *named-item*

Synopsis	Import policy that filters IGMP packets
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping import-policy <i>named-item</i>
Tree	import-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum multicast groups
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
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Context	configure service pw-template <i>pw-template-name</i> igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping send-queries <i>boolean</i>

Tree	send-queries
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version keyword

Synopsis	IGMP version
Context	configure service pw-template <i>pw-template-name</i> igmp-snooping version <i>keyword</i>
Tree	version
Options	1, 2, 3
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service pw-template <i>pw-template-name</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service pw-template <i>pw-template-name</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip *named-item-64*

Synopsis	IPv4 filter policy name
Context	configure service pw-template <i>pw-template-name</i> ingress filter ip <i>named-item-64</i>

Tree	ip
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *named-item-64*

Synopsis	IPv6 filter policy name
Context	configure service pw-template <i>pw-template-name</i> ingress filter ipv6 <i>named-item-64</i>
Tree	ipv6
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *named-item-64*

Synopsis	MAC filter policy name
Context	configure service pw-template <i>pw-template-name</i> ingress filter mac <i>named-item-64</i>
Tree	mac
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service pw-template <i>pw-template-name</i> ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service pw-template <i>pw-template-name</i> ingress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service pw-template <i>pw-template-name</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *named-item*

Synopsis	Name of the forwarding plane queue group template
Context	configure service pw-template <i>pw-template-name</i> ingress qos network fp-redirect-group group-name <i>named-item</i>
Tree	group-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance for FP ingress queue group
Context	configure service pw-template <i>pw-template-name</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *named-item-64*

Synopsis	Network policy ID
Context	configure service pw-template <i>pw-template-name</i> ingress qos network policy-name <i>named-item-64</i>
Tree	policy-name
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l2pt

Synopsis	Enter the l2pt context
Context	configure service pw-template <i>pw-template-name</i> l2pt
Tree	l2pt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

termination

Synopsis	Enable the termination context
Context	configure service pw-template <i>pw-template-name</i> l2pt termination
Tree	termination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocols

Synopsis	Enter the protocols context
Context	configure service pw-template <i>pw-template-name</i> l2pt termination protocols
Tree	protocols
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	configure service pw-template pw-template-name l2pt termination protocols cdp boolean
Tree	cdp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dtp boolean

Synopsis	Enable dynamic trunking protocol
Context	configure service pw-template pw-template-name l2pt termination protocols dtp boolean
Tree	dtp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pagp boolean

Synopsis	Enable port aggregation protocol
Context	configure service pw-template pw-template-name l2pt termination protocols pagp boolean
Tree	pagp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp boolean

Synopsis	Enable all spanning tree protocols
Context	configure service pw-template pw-template-name l2pt termination protocols stp boolean
Tree	stp

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udld *boolean*

Synopsis	Enable unidirectional link detection
Context	configure service pw-template <i>pw-template-name</i> l2pt termination protocols udld <i>boolean</i>
Tree	udld
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vtp *boolean*

Synopsis	Enable virtual trunk protocol
Context	configure service pw-template <i>pw-template-name</i> l2pt termination protocols vtp <i>boolean</i>
Tree	vtp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu *number*

Synopsis	MTU the SDP can transmit
Context	configure service pw-template <i>pw-template-name</i> path-mtu <i>number</i>
Tree	path-mtu
Description	<p>This command configures the path MTU that the SDP can transmit.</p> <p>When an SDP created using the PW template is in use by a service, the path MTU cannot be modified.</p> <p>When not configured, the path MTU is derived from the network interface IP MTU.</p>
Range	576 to 9782
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

provisioned-sdp *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Provisioned SDP type
Context	configure service pw-template <i>pw-template-name</i> provisioned-sdp <i>keyword</i>
Tree	provisioned-sdp
Options	use, prefer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-template-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PW template ID
Context	configure service pw-template <i>pw-template-name</i> pw-template-id <i>number</i>
Tree	pw-template-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-exclude [[group-name](#)] *reference*

Synopsis	Add a list entry for sdp-exclude
Context	configure service pw-template <i>pw-template-name</i> sdp-exclude <i>reference</i>
Tree	sdp-exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] reference

Synopsis	SDP group name
Context	configure service pw-template <i>pw-template-name</i> sdp-exclude <i>reference</i>
Tree	sdp-exclude
Reference	configure service sdp-group group-name <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-include [group-name] reference

Synopsis	Add a list entry for sdp-include
Context	configure service pw-template <i>pw-template-name</i> sdp-include <i>reference</i>
Tree	sdp-include
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] reference

Synopsis	SDP group name
Context	configure service pw-template <i>pw-template-name</i> sdp-include <i>reference</i>
Tree	sdp-include
Reference	configure service sdp-group group-name <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon-group

Synopsis	Enter the split-horizon-group context
Context	configure service pw-template <i>pw-template-name</i> split-horizon-group
Tree	split-horizon-group
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [service](#) [pw-template](#) *pw-template-name* [split-horizon-group](#) [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fdb

Synopsis Enter the **fdb** context

Context **configure** [service](#) [pw-template](#) *pw-template-name* [split-horizon-group](#) [fdb](#)

Tree [fdb](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

saps

Synopsis Enter the **saps** context

Context **configure** [service](#) [pw-template](#) *pw-template-name* [split-horizon-group](#) [fdb](#) [saps](#)

Tree [saps](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis Enable automatic update of MAC protect list

Context **configure** [service](#) [pw-template](#) *pw-template-name* [split-horizon-group](#) [fdb](#) [saps](#) [auto-learn-mac-protect](#) *boolean*

Tree [auto-learn-mac-protect](#)

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

discard-unprotected-dest-mac *boolean*

Synopsis Enable/disable unprotected dest MAC restriction
Context **configure** [service pw-template](#) *pw-template-name* [split-horizon-group fdb saps discard-unprotected-dest-mac](#) *boolean*
Tree [discard-unprotected-dest-mac](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis Action taken after a relearn request for protected MAC
Context **configure** [service pw-template](#) *pw-template-name* [split-horizon-group fdb saps protected-src-mac-violation-action](#) *keyword*
Tree [protected-src-mac-violation-action](#)
Description This command configures how the system handles relearn requests for protected MAC addresses.
Options sap-oper-down, alarm-only, discard
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

name *named-item*

Synopsis Split horizon group name to which the SDP belongs
Context **configure** [service pw-template](#) *pw-template-name* [split-horizon-group name](#) *named-item*
Tree [name](#)
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

stp

Synopsis	Enter the stp context
Context	configure service pw-template <i>pw-template-name</i> stp
Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of STP
Context	configure service pw-template <i>pw-template-name</i> stp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	configure service pw-template <i>pw-template-name</i> stp auto-edge <i>boolean</i>
Tree	auto-edge
Description	<p>When configured to true, the router automatically detects the edge port characteristics of the SAP or spoke SDP. The STP concludes there is no bridge behind the spoke SDP, the OPER_EDGE variable is dynamically set to true. If a BPDU is received, the OPER_EDGE variable is dynamically set to false.</p> <p>When configured to false, the router disables automatic detection.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	configure service pw-template <i>pw-template-name</i> stp edge-port <i>boolean</i>
Tree	edge-port

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-type *keyword*

Synopsis	Configure STP link-type
Context	configure service pw-template <i>pw-template-name</i> stp link-type <i>keyword</i>
Tree	link-type
Options	pt-pt, shared
Default	pt-pt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-cost *number*

Synopsis	Configure path-cost
Context	configure service pw-template <i>pw-template-name</i> stp path-cost <i>number</i>
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Configure STP priority
Context	configure service pw-template <i>pw-template-name</i> stp priority <i>number</i>
Tree	priority
Range	0 to 255
Default	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	configure service pw-template <i>pw-template-name</i> stp root-guard <i>boolean</i>
Tree	root-guard
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-type *keyword*

Synopsis	Virtual circuit type associated with the SDP bind
Context	configure service pw-template <i>pw-template-name</i> vc-type <i>keyword</i>
Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-vc-tag *number*

Synopsis	VLAN VC tag
Context	configure service pw-template <i>pw-template-name</i> vlan-vc-tag <i>number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp [[sdp-id](#)] *number*

Synopsis	Enter the sdp list instance
Context	configure service sdp <i>number</i>
Tree	sdp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-id] *number*

Synopsis	Service Destination Point (SDP) ID
Context	configure service sdp number
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy associated with an SDP
Context	configure service sdp number accounting-policy reference
Tree	accounting-policy
Description	This command associates an accounting policy with an SDP. When unconfigured, there is no accounting policy applied to the SDP.
Reference	configure log accounting-policy number
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SDP
Context	configure service sdp number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-mtu-override *boolean*

Synopsis	Override the advertised VC-type MTU using the SDP ID
Context	configure service sdp number adv-mtu-override boolean

Tree	adv-mtu-override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-fragmentation *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	configure service sdp <i>number</i> allow-fragmentation <i>boolean</i>
Tree	allow-fragmentation
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-tunnel *boolean*

Synopsis	Allow use of BGP route tunnels to reach far-end nodes
Context	configure service sdp <i>number</i> bgp-tunnel <i>boolean</i>
Tree	bgp-tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

booking-factor *number*

Synopsis	Percentage of SDP max available bandwidth for VLL CAC
Context	configure service sdp <i>number</i> booking-factor <i>number</i>
Tree	booking-factor
Range	0 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting statistics for this SDP
Context	configure service sdp number collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delivery-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Delivery type used by the SDP
Context	configure service sdp number delivery-type <i>keyword</i>
Tree	delivery-type
Options	gre, mpls, l2tpv3, gre-eth-bridged
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service sdp number description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

far-end

Synopsis	Enter the far-end context
Context	configure service sdp number far-end

Tree	far-end
Description	Commands in this context configure the system IP address of the far-end destination router for the SDP that is the termination point for a service.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the far-end destination router
Context	configure service sdp number far-end ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Description	This command configures the system IPv4 or IPv6 address of the far-end destination router for the SDP that is the termination point for a service.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keep-alive

Synopsis	Enter the keep-alive context
Context	configure service sdp number keep-alive
Tree	keep-alive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of keepalive mechanism for the SDP
Context	configure service sdp number keep-alive admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-time *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time period between SDP keepalive messages
Context	configure <i>service sdp number keep-alive hello-time number</i>
Tree	<i>hello-time</i>
Range	1 to 3600
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down-time *number*

Synopsis	Minimum time the SDP remains in the down state
Context	configure <i>service sdp number keep-alive hold-down-time number</i>
Tree	<i>hold-down-time</i>
Range	0 to 3600
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-drop-count *number*

Synopsis	Maximum failed request attempts when SDP is down
Context	configure <i>service sdp number keep-alive maximum-drop-count number</i>
Tree	<i>maximum-drop-count</i>
Range	1 to 5

Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-length *number*

Synopsis	Length of the keepalive request messages transmitted
Context	configure service sdp <i>number</i> keep-alive message-length <i>number</i>
Tree	message-length
Range	40 to 9198
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time SDP waits before tearing down the session
Context	configure service sdp <i>number</i> keep-alive timeout <i>number</i>
Tree	timeout
Range	1 to 10
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable LDP-signaled LSPs
Context	configure service sdp <i>number</i> ldp <i>boolean</i>
Tree	ldp
Default	false
Introduced	25.3.R2

Platforms7705 SAR Gen 2

local-end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local end address of the tunnel defined by the SDP
Context	configure service sdp number local-end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-end
Description	<p>This command configures the local-end address of the following SDP encapsulation types:</p> <ul style="list-style-type: none">IPv6 address of the termination point of an SDP of encapsulation type l2tpv3 (L2TP v3 tunnel)IPv4/IPv6 source address of an SDP of encapsulation type gre-eth-bridged (L2oGRE SDP)IPv4/IPv6 source address of an SDP of encapsulation type gre (GRE SDP)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp [**lsp-name**] *named-item-64*

Synopsis	Add a list entry for lsp
Context	configure service sdp number lsp named-item-64
Tree	lsp
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lsp-name] *named-item-64*

Synopsis	LSP name to associate with the SDP
Context	configure service sdp number lsp named-item-64
Tree	lsp
String length	1 to 64

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Metric used in tunnel table manager for decision making
Context	configure service sdp <i>number</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mixed-lsp-mode

Synopsis	Enable the mixed-lsp-mode context
Context	configure service sdp <i>number</i> mixed-lsp-mode
Tree	mixed-lsp-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-time (*number* | *keyword*)

Synopsis	Delay before SDP can revert to higher priority LSP type
Context	configure service sdp <i>number</i> mixed-lsp-mode revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-domain *reference*

Synopsis	Network domain name associated with the SDP
Context	configure service sdp number network-domain reference
Tree	network-domain
Reference	configure router named-item-64 network-domains network-domain named-item
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu *number*

Synopsis	Maximum Transmission Unit (MTU) the SDP can transmit
Context	configure service sdp number path-mtu number
Tree	path-mtu
Range	576 to 9782
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-group [[group-name](#)] *reference*

Synopsis	Add a list entry for sdp-group
Context	configure service sdp number sdp-group reference
Tree	sdp-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[group-name](#)] *reference*

Synopsis	SDP administrative group name
Context	configure service sdp number sdp-group reference
Tree	sdp-group
Reference	configure service sdp-group group-name named-item
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

signaling *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Signaling protocol used to obtain pseudowire labels

Context **configure** service sdp number signaling keyword

Tree signaling

Description This command specifies the signaling protocol used to obtain the ingress and egress pseudowire labels in frames transmitted and received on the SDP. The signaling value can only be changed while the administrative status of the SDP is down. Additionally, the signaling can only be changed on an SDP if the SDP is not in use by BGP-AD or BGP-VPLS. BGP signaling can only be enabled if the SDP does not already have pseudowires signaled over it. Also, BGP signaling is not supported with mixed mode LSP SDPs.

Note: If the **tldp** option is selected as the mechanism for exchanging service labels over an MPLS or GRE SDP and the T-LDP session is automatically established, an explicit T-LDP session that is subsequently configured takes precedence over the automatic T-LDP session. However, if the explicit, manually-configured session is then removed, the system does not revert to the automatic session and the automatic session is also deleted. To address this, recreate the T-LDP session by using the **admin-state** command to administratively disable and then enable the SDP.

Options off, tldp, bgp

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sr-isis *boolean*

Synopsis Enable Segment Routing for IS-IS

Context **configure** service sdp number sr-isis boolean

Tree sr-isis

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sr-ospf boolean

Synopsis	Enable an MPLS SDP of LSP type OSPF Segment Routing
Context	configure service sdp <i>number</i> sr-ospf <i>boolean</i>
Tree	sr-ospf
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-far-end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System address of the far-end router for the SDP
Context	configure service sdp <i>number</i> tunnel-far-end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	tunnel-far-end
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-vc-etype etype-value

Synopsis	VLAN VC Ethertype
Context	configure service sdp <i>number</i> vlan-vc-etype <i>etype-value</i>
Tree	vlan-vc-etype
String length	5 to 6
String format	'etype-value' must be 0x0600-0xFFFF (e-type range)
Default	0x8100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp boolean

Synopsis	Allow weighted load-balancing on an SDP
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Context	configure service sdp <i>number weighted-ecmp boolean</i>
Tree	weighted-ecmp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sdp-group

Synopsis	Enter the sdp-group context
Context	configure service sdp-group
Tree	sdp-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name [[group-name](#)] *named-item*

Synopsis	Enter the group-name list instance
Context	configure service sdp-group group-name <i>named-item</i>
Tree	group-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item*

Synopsis	SDP administrative group name
Context	configure service sdp-group group-name <i>named-item</i>
Tree	group-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique group value associated with the SDP admin group
Context	configure service sdp-group <i>group-name</i> <i>named-item</i> value <i>number</i>
Tree	value
Range	0 to 31
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
Context	configure service system
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp

Synopsis	Enter the bgp context
Context	configure service system bgp
Tree	bgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	configure service system bgp evpn
Tree	evpn
Description	Commands in this context configure BGP EVPN options.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ad-per-es-route

Synopsis	Enter the ad-per-es-route context
Context	configure service system bgp evpn ad-per-es-route
Tree	ad-per-es-route
Description	<p>Commands in this context configure how Ethernet AD per-ES routes are generated.</p> <p>The system can either send a separate Ethernet AD per-ES route per service, or an Ethernet AD per-ES route aggregating the route targets for multiple services. While both alternatives can interoperate, RFC 7432 states that the EVPN AD per-ES route must be sent with a set of route targets corresponding to all the EVIs defined on the ES. SR OS supports both options.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-evi-range *boolean*

Synopsis	Reserve extended RD comm-values for AD per-ES routes
Context	configure service system bgp evpn ad-per-es-route extended-evi-range <i>boolean</i>
Tree	extended-evi-range
Description	<p>When configured to true, the system reserves the RD comm-values 1 to 65535 out of the type 1 RD that is used for AD per-ES routes. If ad-per-es-route route-target-type is also configured to evi-route-target-set, the system can pack the maximum number of EVI route targets in the AD per-ES routes.</p> <p>When configured to false, this command only reserves comm-values 1 to 512.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-distinguisher-ip-address *ipv4-address*

Synopsis	RD IP address for EVPN AD per-ES routes
Context	configure service system bgp evpn ad-per-es-route route-distinguisher-ip-address <i>ipv4-address</i>
Tree	route-distinguisher-ip-address

Description	This command configures the IP address part of the route distinguisher used for AD per-ES routes.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-target-type *keyword*

Synopsis	Method for the AD per-ES route advertisement
Context	configure service system bgp evpn ad-per-es-route route-target-type <i>keyword</i>
Tree	route-target-type
Description	<p>This command configures the method used to advertise the AD per-ES routes.</p> <p>The evi-route-target option advertises a separate AD per-ES route per service.</p> <p>The evi-route-target-set option advertises a set of AD per-ES routes aggregating the route targets for all the services in the ES. A single AD per-ES route with the associated RD (ip-address:1) and a set of EVI route targets are advertised (up to the maximum). When a significant number of EVIs are defined in the ES (hence, the number of route targets), the system sends more than one route. For example:</p> <ul style="list-style-type: none"> AD per-ES route for EVI route target set 1 is sent with RD ip-address:1 AD per-ES route for EVI route target set 2 is sent with RD ip-address:2
Options	evi-route-target – Advertise a separate AD per-ES route per service evi-route-target-set – Advertise a set of AD per-ES routes for all ES services
Default	evi-route-target
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ad-per-evi-routes

Synopsis	Enter the ad-per-evi-routes context
Context	configure service system bgp evpn ad-per-evi-routes
Tree	ad-per-evi-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

attribute-propagation *boolean*

Synopsis	Enable propagation of BGP path attributes
Context	configure service system bgp evpn ad-per-evi-routes attribute-propagation <i>boolean</i>
Tree	attribute-propagation
Description	<p>When configured to true, the router propagates the attributes in multi-instance Epipe services.</p> <p>When configured to false, the router disables the propagation of the attributes, including D-PATH, even if the domain-id is configured in the service.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-path-selection *boolean*

Synopsis	Enable BGP path selection
Context	configure service system bgp evpn ad-per-evi-routes bgp-path-selection <i>boolean</i>
Tree	bgp-path-selection
Description	<p>When configured to true, the router compares the received EVPN VPWS AD per-EVI routes based on the BGP path attributes.</p> <p>The attribute-propagation command must be configured to true.</p> <p>When configured to false, the router does not compare the routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

d-path-ignore *boolean*

Synopsis	Ignore D-PATH for BGP path selection
Context	configure service system bgp evpn ad-per-evi-routes d-path-ignore <i>boolean</i>
Tree	d-path-ignore
Description	<p>When configured to true, the router ignores the Domain PATH attribute (D-PATH) when BGP computes the best path selection for received routes.</p> <p>When configured to false, the router considers the D-PATH length and value as a tiebreaker in determining the best-path selection. In accordance with <i>draft-sr-bess-evpn-dpath</i>, the router compares the D-PATH attribute received in AD per-EVI routes with the same key (same or different RD) as follows:</p>

- Routes with the shortest D-PATH are preferred; therefore, routes not tied for the shortest D-PATH are removed. Routes without D-PATH are considered zero-length D-PATH.
- Routes with the numerically lowest left-most Domain-ID are preferred; therefore, routes not tied for the numerically lowest left-most Domain-ID are removed from consideration.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ethernet-segment [[ethernet-segment-name](#)] *named-item*

Synopsis	Enter the ethernet-segment list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i>
Tree	ethernet-segment
Description	Commands in this context configure an ES instance.
Max. instances	20480
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ethernet-segment-name] *named-item*

Synopsis	ES name
Context	configure service system bgp evpn ethernet-segment <i>named-item</i>
Tree	ethernet-segment
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ac-df-capability *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AC-influenced DF election capability
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> ac-df-capability <i>keyword</i>
Tree	ac-df-capability
Description	<p>This command configures the AC-influenced DF election capability (AC-DF) into the DF election for the ES.</p> <p>AC-DF supports EVPN AD per EVI/ES routes for a specific PE, to ensure the PE is included in the candidate DF election list.</p> <p>When AC-DF is excluded on a specific ES, the presence or absence of the AD per EVI/ES routes from the ES peers does not modify the candidate DF election list for the ES. Excluding the AC-DF is recommended in ESs that use an operational group monitored by the access LAG to signal the standby LACP or to power off.</p>
Options	include, exclude
Default	include
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the ES instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command changes the administrative status of the ES.</p> <p>The ES can be enabled only when the ESI, multihoming mode, and a LAG or port association are configured. If the ES or the corresponding LAG or port is disabled, the ES route and the AD per-ES routes are withdrawn. The ES must be administratively disabled and reenabled for changes to take effect.</p>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-ifl-host-ad-routes



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the advertise-ifl-host-ad-routes context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> advertise-ifl-host-ad-routes
Tree	advertise-ifl-host-ad-routes
Description	<p>Commands in this context enable the AD per-EVI and AD per-ES routes for advertisement in the VPRN and BGP EVPN instances with R-VPLS services attached to the Ethernet segment.</p> <p>The AD per-EVI routes for the VPRNs contain the route distinguisher, route targets, and label or VNI of the VPRN BGP EVPN instance. The instance is specified by using the bgp-evpn-instance command option. The AD per-ES routes for the VPRNs contain the route distinguisher and route targets of the VPRN BGP EVPN instance. On the remote PEs, the reception of EVPN-IFL-HOST routes with an ESI matching the ESI of the VPRN AD per-EVI or -ES routes, enables the IP aliasing procedures for EVPN-IFL-HOST routes.</p>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

bgp-evpn-instance *number*

Synopsis	EVPN interface-less VPRN instance using ES
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> advertise-ifl-host-ad-routes bgp-evpn-instance <i>number</i>
Tree	bgp-evpn-instance
Description	This command specifies the EVPN interface-less BGP instance from which the label or VNI, route distinguisher, and route targets are taken when advertising the AD per-EVI and AD per-ES routes (except for the VNI or label in AD per-ES routes).
Range	1
Default	1
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

route-tag *number*

Synopsis	Route tag added to VPRN AD per-EVI routes of ES
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> advertise-ifl-host-ad-routes route-tag <i>number</i>
Tree	route-tag
Description	This command configures the router with a tag value for VPRN AD per-EVI routes. This value can be matched on export policies. VPRN AD per-ES routes are not associated with this route-tag.
Range	1 to 255
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

association

Synopsis	Enter the association context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association
Tree	association
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i>
Tree	lag
Description	Commands in this context configure the LAG associated with the ES. A LAG can be associated with an ES configured with either the single-active or all-active multihoming mode. Additionally, a specified LAG can be associated to only one ES at any time.
Max. instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] reference

Synopsis	LAG multihomed with the ES entry
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i>
Tree	lag
Description	This command configures the LAG associated with the ES.
Reference	configure lag <i>lag-interface</i>
Notes	This element is part of a list key.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges
Tree	virtual-ranges
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1q

Synopsis	Enter the dot1q context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges dot1q
Tree	dot1q
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

q-tag [[start](#)] (*number* | *keyword*)

Synopsis	Enter the q-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>)
Tree	q-tag

Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[start] (*number* | *keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>)
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end (*number* | *keyword*)

Synopsis	Upper bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qinq

Synopsis	Enter the qinq context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges qinq
Tree	qinq
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

s-tag [**start**] (*number* | *keyword*)

Synopsis Enter the **s-tag** list instance

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *named-item* [association](#) [lag](#) *reference* [virtual-ranges](#) [qinq](#) **s-tag** (*number* | *keyword*)

Tree [s-tag](#)

Max. instances 8

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[start] (*number* | *keyword*)

Synopsis Lower bound of the s-tag VLAN ID range

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *named-item* [association](#) [lag](#) *reference* [virtual-ranges](#) [qinq](#) **s-tag** (*number* | *keyword*)

Tree [s-tag](#)

Range 0 to 4094

Options tag-*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end (*number* | *keyword*)

Synopsis Upper bound of the s-tag VLAN ID range

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *named-item* [association](#) [lag](#) *reference* [virtual-ranges](#) [qinq](#) **s-tag** (*number* | *keyword*) **end** (*number* | *keyword*)

Tree [end](#)

Range 0 to 4094

Options tag-*

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

s-tag-c-tag [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

Synopsis	Enter the s-tag-c-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[s-tag] (*number* | *keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

c-tag-start (*number* | *keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag <i>reference</i> virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

c-tag-end (*number* | *keyword*)

Synopsis	End value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) c-tag-end (<i>number</i> <i>keyword</i>)
Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port [[port-id](#)] *reference*

Synopsis	Enter the port list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port <i>reference</i>
Tree	port
Description	Commands in this context configure the port associated with the ES. A port can be associated with an ES configured with the all-active multihoming mode only. Only Ethernet ports can be added to an ES.
Max. instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[port-id] *reference*

Synopsis	Port multihomed with the ES entry
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port <i>reference</i>
Tree	port
Description	This command configures the port ID associated with the ES.
Reference	configure port <i>port</i>

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges
Tree	virtual-ranges
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1q

Synopsis	Enter the dot1q context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges dot1q
Tree	dot1q
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

q-tag [[start](#)] (*number* | *keyword*)

Synopsis	Enter the q-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>)
Tree	q-tag
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[start] (*number* | *keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
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Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>)
Tree	q-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end (*number* | *keyword*)

Synopsis	Upper bound of the q-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qinq

Synopsis	Enter the qinq context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq
Tree	qinq
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

s-tag [[start](#)] (*number* | *keyword*)

Synopsis	Enter the s-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>)
Tree	s-tag

Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[start] (*number* | *keyword*)

Synopsis	Lower bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>)
Tree	s-tag
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end (*number* | *keyword*)

Synopsis	Upper bound of the s-tag VLAN ID range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>)
Tree	end
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

s-tag-c-tag [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

Synopsis	Enter the s-tag-c-tag list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag

Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[s-tag] (*number* | *keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

c-tag-start (*number* | *keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>)
Tree	s-tag-c-tag
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

c-tag-end (*number* | *keyword*)

Synopsis	End value of the qinq c-tag range
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) c-tag-end (<i>number</i> <i>keyword</i>)

Tree	c-tag-end
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn-next-hop [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the vprn-next-hop list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	vprn-next-hop
Description	Commands in this list instance are used to associate an IPv4 or IPv6 address to an Ethernet segment. A virtual Ethernet segment using this VPRN next-hop association represents a Layer 3 Ethernet segment as described in <i>draft-sajassi-bess-evpn-ip-aliasing</i> . This IP address must be installed in the route table of the VPRN service identified by the EVI so that the Auto-Discovery per-ES or EVI routes for the ES are advertised. Only one VPRN next hop is supported per Ethernet segment.
Max. instances	1
Notes	The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop .
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	VPRN next-hop address
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association vprn-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	vprn-next-hop
Notes	This element is part of a list key.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

virtual-ranges

Synopsis	Enter the virtual-ranges context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association vpnnext-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) virtual-ranges
Tree	virtual-ranges
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

evi [[start](#)] *number*

Synopsis	Add a list entry for evi
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association vpnnext-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) virtual-ranges evi <i>number</i>
Tree	evi
Max. instances	1
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

[\[start\]](#) *number*

Synopsis	EVI range start information
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> association vpnnext-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) virtual-ranges evi <i>number</i>
Tree	evi
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

auto-esi *keyword*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN ES auto-ESI type
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> auto-esi <i>keyword</i>
Tree	auto-esi
Description	This command configures the auto-ESI type to use in the ES. When configured to none , a manual ESI must be configured. When type-1 is configured, a manual ESI cannot be configured and the ESI is automatically derived in accordance with the RFC 7432 ESI type 1 definition.
Options	none, type-1
Default	none
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

df-election

Synopsis	Enter the df-election context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election
Tree	df-election
Description	Commands in this context configure DF election for the ES.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

es-activation-timer *number*

Synopsis	Activation timer per ES
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election es-activation-timer <i>number</i>
Tree	es-activation-timer
Description	This command configures the ES activation timer for a specified ES. This timer delays the activation of a specified ES on a PE that has been elected as the DF. The SAP or SDP binding associated to an ES is activated (in case of single-active multihoming) or added to the default multicast list (in case of all-active multihoming) only when this timer has expired. If this command is not configured, the system uses the global value configured for the configure redundancy bgp-evpn ethernet-segment activation-timer command.
Range	0 to 100
Units	seconds
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

manual

Synopsis	Enter the manual context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual
Tree	manual
Description	<p>Commands in this context manually configure the service-carving algorithm, that is, the EVIs for which the PE is DF.</p> <p>The following service-carving manual algorithms are used for DF election:</p> <ul style="list-style-type: none"> <p>manual non-preference</p> <p>When the preference command is not configured, the algorithm uses the EVI range to determine the primary PE for the configured EVIs. The manual non-preference algorithm only supports two PEs in the ES.</p> <p>manual preference-based</p> <p>When the preference command is configured, the algorithm uses the configured value to determine the DF election. For EVIs not defined in the range, the highest-preference algorithm is used. For configured EVIs, the lowest-preference algorithm is used.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evi [[start](#)] *number*

Synopsis	Enter the evi list instance
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual evi <i>number</i>
Tree	evi
Description	Commands in this context configure the list of EVI ranges for which to use the PE as the primary DF, or to use the lowest preference algorithm.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[start](#)] *number*

Synopsis	Lower bound of EVI range for which the PE is primary
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Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual <i>evi number</i>
Tree	<i>evi</i>
Description	This command configures the initial EVI value of the range.
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of EVI range for which the PE is primary
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual <i>evi number end number</i>
Tree	<i>end</i>
Description	This command configures the end EVI value of the range. If not configured, only the individual start value is considered.
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference

Synopsis	Enable the preference context
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual <i>preference</i>
Tree	<i>preference</i>
Description	Commands in this context configure the preference for the ES and determine the DF election mode. Enabling this context ensures that the PE runs the preference-based DF election algorithm.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	DF election mode
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual preference mode <i>keyword</i>
Tree	mode
Description	<p>This command configures the DF election mode for the ES.</p> <p>A revertive ES takes over an existing active DF PE when the ES comes back after a failure, while a non-revertive ES does not.</p>
Options	revertive, non-revertive
Default	revertive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Preference used to elect the DF
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election manual preference value <i>number</i>
Tree	value
Description	<p>This command configures the preference value used for the PE in the ES, which modifies the default value. The ES is not required to be administratively disabled to modify this command during maintenance operations.</p>
Range	0 to 65535
Default	32767
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-carving-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service-carving mode for the ES
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> df-election service-carving-mode <i>keyword</i>
Tree	service-carving-mode
Description	<p>This command configures the service-carving mode, which determines how the DF is elected for a specified ES and service.</p> <p>The auto mode is the service-carving algorithm defined in RFC 7432. The DF for the service is calculated based on the modulo function of the service (identified by either the EVI or ISID) and the number of PEs.</p> <p>In manual mode, the DF is elected based on the manual configuration added in the df-election manual context.</p> <p>In off mode, all the services elect the same DF PE (assuming the same PEs are active for all the configured services). The PE with the lowest IP is elected as DF for the ES.</p>
Options	auto – Elect the DF based on the RFC 7432 algorithm manual – Elect the DF based on the manual configuration off – Elect the same DF with the lowest IP for all services
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

esi ethernet-segment-id-mac-based



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ESI to signal in BGP-EVPN routes
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> esi ethernet-segment-id-mac-based
Tree	esi
Description	This command configures the 10-byte ESI associated with the ES that is signaled in the BGP-EVPN routes. Reserved ESI values (0 and MAX-ESI) are not allowed.
String format	'ethernet-segment-id-mac-based' must be 10-byte ESI hex (0x... or colon/hyphen octets)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

layer-3-neighbor-synchronization *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enables Layer 3 neighbor synchronization
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> layer-3-neighbor-synchronization <i>boolean</i>
Tree	layer-3-neighbor-synchronization
Description	When configured to true , the router synchronizes ARP and neighbor entries across all PEs attached to the same CE that use a single LAG. When configured to false , Layer 3 neighbor synchronization is disabled.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

multi-homing-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode of the Ethernet segment
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> multi-homing-mode <i>keyword</i>
Tree	multi-homing-mode
Description	This command configures the multihoming mode for the Ethernet segment as defined in RFC 7432. By default, the use of ESI labels is enabled for all-active , single-active , and port-active , as defined in RFC 7432. For single-active and port-active multihoming, the ESI label is used to avoid transient loops. When single-active-no-esi-label , all-active-no-esi-label , or port-active-no-esi-label is specified, the system does not allocate a label for the ESI and consequently advertises ESI label 0 to peers. Even if the ESI is configured not to send the ESI label, upon receiving an ESI label from a peer, the PE always sends traffic to that peer using the received ESI label.
Options	none – Keyword single-active – Keyword single-active-no-esi-label – Keyword all-active – Keyword

	all-active-no-esi-label – Keyword port-active – Configures port-active mode port-active-no-esi-label – Configures port-active mode with no ESI label
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group ID
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> oper-group reference
Tree	oper-group
Description	<p>This command adds the ES as a member of the operational group.</p> <p>The state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. The ES operational group is monitored on the LAG associated with the ES, along with single-active multihoming, so that the NDF state can be signaled to the CE by LAG standby signaling.</p>
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

orig-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Originating IP address advertised in the ES route
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> orig-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	orig-ip
Description	<p>This command configures the Originating IP field advertised in the ES route for a specific ES. By default, the Originating IP is the system IP address of the PE.</p> <p>This command configuration affects the following cases:</p> <ul style="list-style-type: none">•

When adding local ES routes, this command changes how the ES routes are added to the candidate list; the configured IP address is added, instead of the system IP address.

-

When advertising local ES routes, the configured IP address is used for the originating IP address of the route.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address for ES and AD per ES routes
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> route-next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	route-next-hop
Description	This command configures the next hop to the configured IP address value for the following routes: <ul style="list-style-type: none">• ES <ul style="list-style-type: none">• AD per-ES (irrespective of the evi-route-target-set or evi-route-target configuration)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ES type
Context	configure service system bgp evpn ethernet-segment <i>named-item</i> type <i>keyword</i>
Tree	type
Description	This command configures the ES type.

The **virtual** option specifies that the ES is virtual and is associated with logical interfaces, in addition to ports and LAGs.

Options	none, virtual
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-routes

Synopsis	Enter the ip-prefix-routes context
Context	configure service system bgp evpn ip-prefix-routes
Tree	ip-prefix-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-ful

Synopsis	Enter the interface-ful context
Context	configure service system bgp evpn ip-prefix-routes interface-ful
Tree	interface-ful
Description	Commands in this context configure IP prefix routes for Interface-ful (IFF) configurations.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

attribute-uniform-propagation *boolean*

Synopsis	Enable attribute uniform propagation
Context	configure service system bgp evpn ip-prefix-routes interface-ful attribute-uniform-propagation <i>boolean</i>
Tree	attribute-uniform-propagation
Description	<p>When configured to true, the system enables the uniform propagation of BGP attributes for EVPN-IFF routes.</p> <p>When configured to false, the system re-originates the BGP path attributes when propagating EVPN-IFF routes into other inter-subnet forwarding families.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bgp-path-selection *boolean*

Synopsis	Enable BGP path selection
Context	configure service system bgp evpn ip-prefix-routes interface-ful bgp-path-selection <i>boolean</i>
Tree	bgp-path-selection
Description	<p>When configured to true, the system enables BGP path selection for EVPN-IFF routes. The EVPN-IFF routes are ordered and selected in a similar manner as IP-VPN or EVPN-IFL routes, that is, based on the regular BGP path selection process.</p> <p>When configured to false, the system orders EVPN-IFF routes based on their {R-VPLS Ifindex, RD, Ethernet Tag}. For example, if two EVPN-IFF routes with different Route Distinguishers (RDs) are received for the same prefix on the same R-VPLS, the route with the lowest RD is selected.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

d-path-length-ignore *boolean*

Synopsis	Ignore the D-PATH length when using BGP path selection
Context	configure service system bgp evpn ip-prefix-routes interface-ful d-path-length-ignore <i>boolean</i>
Tree	d-path-length-ignore
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls

Synopsis	Enter the mpls context
Context	configure service system bgp evpn mpls
Tree	mpls
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

multicast-leave-sync-propagation *number*

Synopsis	Multicast leave group synchronization delay
Context	configure service system bgp evpn multicast-leave-sync-propagation <i>number</i>
Tree	multicast-leave-sync-propagation
Description	<p>This command configures the additional amount of time that the system waits before removing a multicast state that was synchronized in an Ethernet Segment via Multicast Join or Leave Synch routes. This value represents a delta corresponding to the time it takes for a BGP advertisement to propagate to ES peers.</p> <p>The node triggering the route computes the maximum response time as the product of the locally configured values, Last Member Query Count and Last Member Query Interval, and adds the delta value to the maximum response time. The query count value is configured in the configure services vrpn igmp robust-count command. The query interval value is taken from the configure service vpls sap igmp-snooping query-last-member-interval or the configure service vpls spoke-sdp igmp-snooping query-last-member-interval configuration, depending on the Ethernet Segment.</p> <p>Increasing the maximum response time by this value can help minimize the churn of removing and recreating the state on the node.</p> <p>This value should be configured consistently in all ES peers.</p>
Range	0 to 300
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-distinguisher *vpn-route-distinguisher*

Synopsis	RD for ES routes
Context	configure service system bgp evpn route-distinguisher <i>vpn-route-distinguisher</i>
Tree	route-distinguisher
Description	<p>This command configures RD component that is signaled in the MP-BGP NLRI for EVPN corresponding to the base EVPN instance (for ES routes). When this command is not configured, the system uses the system IP address as the default RD.</p>
String format	'vpn-route-distinguisher' must be IP:comm or AS-number pair per RD rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-auto-rd-range

Synopsis	Enter the bgp-auto-rd-range context
Context	configure service system bgp-auto-rd-range
Tree	bgp-auto-rd-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community-value

Synopsis	Enter the community-value context
Context	configure service system bgp-auto-rd-range community-value
Tree	community-value
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of BGP route distinguisher community range
Context	configure service system bgp-auto-rd-range community-value <i>end number</i>
Tree	end
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start number

Synopsis	Lower bound of BGP route distinguisher community range
Context	configure service system bgp-auto-rd-range community-value <i>start number</i>
Tree	start
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv4-address*

Synopsis	IP address used for selecting the route distinguisher
Context	configure service system bgp-auto-rd-range ip-address <i>ipv4-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	configure service system fdb
Tree	fdb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

table-size *number*

Synopsis	Maximum FDB entries in the system
Context	configure service system fdb table-size <i>number</i>
Tree	table-size
Description	<p>This command configures the maximum system FDB table size, which is dependent on the chassis type.</p> <p>CPMs with at least 16 GB of memory are required when exceeding 500 000 MAC addresses in a system. This command cannot be set to a value lower than the default, which is chassis-dependent. The maximum system FDB table size also limits the maximum FDB table size of any card within the system.</p> <p>The command default depends on the chassis type and available memory.</p>
Range	4095 to 2047999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-gre-source-ip *ipv4-unicast-address*

Synopsis	VPN GRE source ip-address
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Context	configure service system vpn-gre-source-ip <i>ipv4-unicast-address</i>
Tree	vpn-gre-source-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpls [**service-name**] *service-name*

Synopsis	Enter the vpls list instance
Context	configure service vpls <i>service-name</i>
Tree	vpls
Description	Commands in this context create or edit a Virtual Private LAN Services (VPLS) instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] *service-name*

Synopsis	Administrative service name
Context	configure service vpls <i>service-name</i>
Tree	vpls
Description	<p>This command creates or edits a service instance.</p> <p>When a service is created, the customer keyword and <i>customer-id</i> must be specified and associates the service with a customer. The <i>customer-id</i> must already exist having been created using the customer command in the service context. When a service is created with a customer association, it is not possible to edit the customer association. The service must be deleted and re-created with a new customer association.</p> <p>When a service is created, the use of the customer<i>customer-id</i> is optional to navigate into the service configuration context. If attempting to edit a service with the incorrect <i>customer-id</i> results in an error.</p> <p>This command specifies the unique service identification number identifying the service in the service domain. This ID must be unique to this service and may not be used for any other service of any type. The service ID must be the same number used for every platform on which this service is defined.</p>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the service

Context **configure** *service vpls service-name* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bgp [**bgp-instance**] *number*

Synopsis Enter the **bgp** list instance

Context **configure** *service vpls service-name* **bgp** *number*

Tree **bgp**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[bgp-instance] *number*

Synopsis BGP instance

Context **configure** *service vpls service-name* **bgp** *number*

Tree **bgp**

Range 1 to 2

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adv-service-mtu *number*

Synopsis Advertised service MTU value

Context **configure** *service vpls service-name* **bgp** *number* **adv-service-mtu** *number*

Tree **adv-service-mtu**

Description	This command configures the MTU signaled value used in the BGP for BGP-VPLS service and in the LDP for BGP-AD service. The router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.
Range	0 to 9782
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-template-binding [\[pw-template-name\]](#) *reference*

Synopsis	Enter the pw-template-binding list instance
Context	configure service vpls <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i>
Tree	pw-template-binding
Max. instances	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pw-template-name] *reference*

Synopsis	Policy name
Context	configure service vpls <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i>
Tree	pw-template-binding
Reference	configure service pw-template <i>pw-template-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-rt *route-target*

Synopsis	Import route-target communities
Context	configure service vpls <i>service-name</i> bgp <i>number</i> pw-template-binding <i>reference</i> import-rt <i>route-target</i>
Tree	import-rt
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules

Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure service vpls <i>service-name</i> bgp number pw-template-binding <i>reference</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group
Context	configure service vpls <i>service-name</i> bgp number pw-template-binding <i>reference</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon-group *named-item*

Synopsis	Split horizon group
Context	configure service vpls <i>service-name</i> bgp number pw-template-binding <i>reference</i> split-horizon-group <i>named-item</i>
Tree	split-horizon-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

route-distinguisher (*keyword* | *vpn-route-distinguisher*)

Synopsis High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI

Context **configure** *service vpls* *service-name* *bgp* *number* *route-distinguisher* (*keyword* | *vpn-route-distinguisher*)

Tree *route-distinguisher*

String format 'vpn-route-distinguisher' must be IP:comm or AS-number pair per RD rules

Options auto-rd

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route-target

Synopsis Enter the **route-target** context

Context **configure** *service vpls* *service-name* *bgp* *number* *route-target*

Tree *route-target*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

export *route-target*

Synopsis Extended community name for default import policy

Context **configure** *service vpls* *service-name* *bgp* *number* *route-target* **export** *route-target*

Tree *export*

String length 10 to 28

String format 'route-target-32' must be target:(IPv4:comm|AS pairs|IEEE MAC) per ext-community rules

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

import *route-target*

Synopsis Extended community name for default import policy

Context **configure** *service vpls* *service-name* *bgp* *number* *route-target* **import** *route-target*

Tree	import
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vsi-export *reference*

Synopsis	VSI export policies
Context	configure service vpls <i>service-name</i> bgp <i>number</i> vsi-export <i>reference</i>
Tree	vsi-export
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vsi-import *reference*

Synopsis	VSI import policies
Context	configure service vpls <i>service-name</i> bgp <i>number</i> vsi-import <i>reference</i>
Tree	vsi-import
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ad

Synopsis	Enable the bgp-ad context
Context	configure service vpls <i>service-name</i> bgp-ad

Tree	bgp-ad
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP Auto-Discovery
Context	configure service vpls <i>service-name</i> bgp-ad admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpls-id *vpls-id*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPLS identifier as a 8-byte route distinguisher
Context	configure service vpls <i>service-name</i> bgp-ad vpls-id <i>vpls-id</i>
Tree	vpls-id
String format	'vpls-id' must be IP:comm or AS-number pair per RD rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vsi-id-prefix *ipv4-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSI prefix value
Context	configure service vpls <i>service-name</i> bgp-ad vsi-id-prefix <i>ipv4-address</i>
Tree	vsi-id-prefix

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn

Synopsis	Enable the bgp-evpn context
Context	configure service vpls <i>service-name</i> bgp-evpn
Tree	bgp-evpn
Description	Commands in this context to configure the BGP-EVPN options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

Synopsis	Enter the dhcp context
Context	configure service vpls <i>service-name</i> bgp-evpn dhcp
Tree	dhcp
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> bgp-evpn dhcp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

snoop *boolean*

Synopsis	Enable DHCP snooping on EVPN destinations
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Context	configure service vpls <i>service-name</i> bgp-evpn dhcp snoop <i>boolean</i>
Tree	snoop
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vpls <i>service-name</i> bgp-evpn dhcp6
Tree	dhcp6
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> bgp-evpn dhcp6 description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

ldra

Synopsis	Enable the ldra context
Context	configure service vpls <i>service-name</i> bgp-evpn dhcp6 ldra
Tree	ldra
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

interface-type *keyword*

Synopsis	LDRA interface type
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Context	configure <i>service vpls</i> <i>service-name</i> <i>bgp-evpn dhcp6 ldra interface-type</i> <i>keyword</i>
Tree	<i>interface-type</i>
Description	This command configures this end point as a client-facing or network-facing interface. BGP EVPN service tunnels must be configured as a network-facing interface.
Options	client-facing, network-facing
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

evi *number*

Synopsis	EVPN ID
Context	configure <i>service vpls</i> <i>service-name</i> <i>bgp-evpn evi</i> <i>number</i>
Tree	<i>evi</i>
Description	<p>This command configures a 2-byte EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>If not specified, the EVPN ID value is zero and no route distinguisher or route targets are auto-derived from it.</p> <p>If the EVI ID value is specified and no other route-distinguisher or route-target is configured in the service, the following rules apply:</p> <ul style="list-style-type: none"> • the route distinguisher is derived from <system_ip>:evi • the route target is derived from <autonomous-system>:evi <p>If VSI import and export policies are configured, the route target must be configured in the policies and those values take precedence over the auto-derived route targets. If bgp-ad vpls-id and bgp-evpn evi are both configured on the same service, the VPLS ID auto-derived route target or route distinguisher takes precedence over the values auto-derived from the EVI. Use the show service id bgp command to display the operational route target for a service.</p>
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mtu-mismatch *boolean*

Synopsis	Ignore MTU mismatch
Context	configure <i>service vpls</i> <i>service-name</i> <i>bgp-evpn ignore-mtu-mismatch</i> <i>boolean</i>
Tree	<i>ignore-mtu-mismatch</i>

Description	When configured to true , the system ignores the received Layer 2 MTU in the L2 Attributes extended community of the IMET route for a peer. When configured to false , the system compares the local service MTU against the received Layer 2 MTU and if there is a mismatch, keeps the EVPN destination to the peer with operational state down.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incl-mcast-orig-ip *ipv4-unicast-address*

Synopsis	Originating IP address
Context	configure <i>service vpls service-name bgp-evpn incl-mcast-orig-ip ipv4-unicast-address</i>
Tree	<i>incl-mcast-orig-ip</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-duplication

Synopsis	Enter the mac-duplication context
Context	configure <i>service vpls service-name bgp-evpn mac-duplication</i>
Tree	<i>mac-duplication</i>
Description	Commands in this context configure the BGP EVPN MAC duplication command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole *boolean*

Synopsis	Use duplicated MAC as a black-hole MAC
Context	configure <i>service vpls service-name bgp-evpn mac-duplication blackhole boolean</i>
Tree	<i>blackhole</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detect

Synopsis	Enter the detect context
Context	configure service vpls <i>service-name</i> bgp-evpn mac-duplication detect
Tree	detect
Description	Commands in this context monitor the number of moves of a MAC address for a period of time (window).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

num-moves *number*

Synopsis	BGP EVPN MAC duplication detection number of moves
Context	configure service vpls <i>service-name</i> bgp-evpn mac-duplication detect num-moves <i>number</i>
Tree	num-moves
Range	3 to 10
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trusted-mac-move-factor *number*

Synopsis	Trusted MAC move factor
Context	configure service vpls <i>service-name</i> bgp-evpn mac-duplication detect trusted-mac-move-factor <i>number</i>
Tree	trusted-mac-move-factor
Description	<p>This command configures the factor by which the number of moves is multiplied when detecting a MAC duplication event for trusted MACs. For example, if the number of moves is 5 and the trusted MAC move factor is 3, 5 moves, within the window, is enough to declare a non-trusted MAC as duplicate. However, 15 moves are needed to declare a trusted MAC as duplicate.</p> <p>By default the factor for a trusted MAC is the same as for a non-trusted MAC. This provides a backwards compatible solution upon upgrade of the node.</p>
Range	1 to 10
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

window *number*

Synopsis BGP EVPN MAC duplication detection window

Context **configure** *service vpls service-name bgp-evpn mac-duplication detect window number*

Tree *window*

Range 1 to 15

Units minutes

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

retry (*number* | *keyword*)

Synopsis BGP EVPN MAC duplication retry time

Context **configure** *service vpls service-name bgp-evpn mac-duplication retry (number | keyword)*

Tree *retry*

Range 2 to 60

Units minutes

Options never

Default 9

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

trusted-mac-time *number*

Synopsis Trusted MAC time

Context **configure** *service vpls service-name bgp-evpn mac-duplication trusted-mac-time number*

Tree *trusted-mac-time*

Description This command configures how long a MAC address needs to stay in the FDB as type learned without being flushed or changed in its type so the MAC is declared as trusted for the MAC duplication procedures. If the MAC changes from SAP to SAP within the same VPLS service and node, the MAC does not reset its trusted MAC timer.

Range	1 to 15
Units	minutes
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls [**bgp-instance**] *number*

Synopsis	Enter the mpls list instance
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i>
Tree	mpls
Description	Commands in this context configure the BGP-EVPN MPLS options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bgp-instance] *number*

Synopsis	BGP instance
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i>
Tree	mpls
Range	1 to 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-bind-tunnel

Synopsis	Enter the auto-bind-tunnel context
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure automatic binding of a VPRN service using tunnels to MP-BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel ecmp <i>number</i>
Tree	ecmp
Range	1 to 32
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-strict-tunnel-tagging *boolean*

Synopsis	Enable/disable enforcement of strict tunnel tagging
Context	configure <i>service vpls service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	<i>enforce-strict-tunnel-tagging</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-untagged-route *keyword*

Synopsis	Untagged route type enforcement
Context	configure <i>service vpls service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel</i> enforce-untagged-route <i>keyword</i>
Tree	<i>enforce-untagged-route</i>
Description	This command configures the enforcement of BGP routes with no administrative tag policy applied by modifying the next-hop resolution behavior for autobind services.
Options	none – Untagged routes can bind to tagged or untagged LSPs untagged-tunnel – Untagged routes only bind to LSPs without an admin tag
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution *keyword*

Synopsis	Resolution method for tunnel selection
Context	configure <i>service vpls service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel</i> resolution <i>keyword</i>
Tree	<i>resolution</i>
Options	none, filter, any
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
Tree	resolution-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	<p>When configured to true, BGP searches the BGP LSP for the address of the BGP next hop.</p> <p>When configured to false, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	<p>When configured to true, BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.</p> <p>When configured to false, LDP tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure <i>service vpls service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel resolution-filter rsvp boolean</i>
Tree	<i>rsvp</i>
Description	<p>When configured to true, BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, the RSVP LSP is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure <i>service vpls service-name</i> <i>bgp-evpn mpls number</i> <i>auto-bind-tunnel resolution-filter sr-isis boolean</i>
Tree	<i>sr-isis</i>
Description	<p>When configured to true, BGP uses an IS-IS tunnel type to resolve the BGP next hop.</p> <p>When the sr-isis command is enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none">• Select the SR tunnel submitted by the IS-IS instance with the lowest tunnel table preference.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure <i>service vpls service-name bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf boolean</i>
Tree	<i>sr-ospf</i>
Description	<p>When configured to true, BGP uses an OSPF tunnel type to resolve the BGP next hop. When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none">• Select the SR tunnel submitted by the OSPF instance with the lowest tunnel table preference.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure <i>service vpls service-name bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf3 boolean</i>
Tree	<i>sr-ospf3</i>
Description	<p>When configured to true, BGP uses an OSPF3 tunnel type to resolve the BGP next hop. When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none">• Select the SR tunnel submitted by the OSPFv3 instance with the lowest tunnel table preference.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of SR policies to resolve the next hop of BGP-EVPN service routes.</p> <p>This command configures BGP to search for an SR policy with:</p> <ul style="list-style-type: none"> • a non-null endpoint that matches the next hop of the service route, and • a color value that matches the highest numbered color for the extended community attached to the service route
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	<p>When configured to true, BGP uses an SR-TE tunnel type to resolve the BGP next hop.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, SR-TE tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter udp <i>boolean</i>

Tree	udp
Description	When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to false , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Allow weighted load balancing
Context	configure service vpls service-name bgp-evpn mpls number auto-bind-tunnel weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	When configured to true , this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP. When configured to false , this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable control word support
Context	configure service vpls service-name bgp-evpn mpls number control-word <i>boolean</i>
Tree	control-word
Description	When configured to true , the router enables the transmission and reception of the control word for all EVPN-MPLS destinations at the same time.
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

default-route-tag *one-byte-value*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure <i>service vpls service-name bgp-evpn mpls number default-route-tag one-byte-value</i>
Tree	<i>default-route-tag</i>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	configure <i>service vpls service-name bgp-evpn mpls number dynamic-egress-label-limit boolean</i>
Tree	<i>dynamic-egress-label-limit</i>
Description	<p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum ECMP routes information
Context	configure <i>service vpls service-name bgp-evpn mpls number ecmp number</i>
Tree	<i>ecmp</i>
Range	1 to 32
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *boolean*

Synopsis	Allow use of entropy labels for spoke SDPs
Context	configure <i>service vpls service-name bgp-evpn mpls number entropy-label boolean</i>
Tree	<i>entropy-label</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evi-three-byte-auto-rt *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	configure <i>service vpls service-name bgp-evpn mpls number evi-three-byte-auto-rt boolean</i>
Tree	<i>evi-three-byte-auto-rt</i>
Description	<p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none">• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken• A=0 (for auto-derivation)

- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> fdb
Tree	fdb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Relearn request for a protected MAC is received action
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Options	discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-vc-forwarding *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC forwarding action
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> force-vc-forwarding <i>keyword</i>

Tree	force-vc-forwarding
Description	<p>This command configures the VLAN tag processing used on the service.</p> <p>The vlan option configures the router to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag, which is sent in the customer frame to the EVPN destinations.</p> <p>The qinq-c-tag-c-tag option configures the router to push two tags with the same value derived from the inner service-delimiting tag. At network ingress, two VLAN tags are extracted at most and the C-tag and S-tag p/de bits are propagated to the egress SAPs.</p> <p>The qinq-s-tag-c-tag option configures the router to push two tags that are copied from the QinQ service-delimiting VLAN values and may be different. At network ingress, two VLAN tags are extracted at most and the p/de bits are propagated to the egress SAP service-delimiting S-tag and C-tag respectively.</p>
Options	<p>vlan – Push VLAN ID and 802.1p bits of service-delimiting qtag</p> <p>qinq-c-tag-c-tag – Push two tags identical to inner service-delimiting tag</p> <p>qinq-s-tag-c-tag – Push two tags based on QinQ service-delimiting values</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label *boolean*

Synopsis	Default profile when the CP-provided profile is unknown
Context	configure service vpls service-name bgp-evpn mpls number hash-label <i>boolean</i>
Tree	hash-label
Description	<p>When configured to true, the router pushes the hash label.</p> <p>The hash label is never used for BUM packets.</p> <p>The hash-label push is based on the following:</p> <ul style="list-style-type: none"> • If advertise-l2-attributes (in the configure service vpls bgp-evpn routes incl-mcast context) is set to false, the hash label is pushed to a unicast EVPN destination. • If advertise-l2-attributes is set to true, the F bit is set to 1 in the Layer 2 Attributes Extended Community of the EVPN IMET route for the service. The hash label is pushed only if the remote PE signaled support for hash label (received F bit is set to 1).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress-replication-bum-label *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the same label as the one advertised for unicast traffic
Context	configure <i>service vpls service-name bgp-evpn mpls number ingress-replication-bum-label boolean</i>
Tree	<i>ingress-replication-bum-label</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mh-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	configure <i>service vpls service-name bgp-evpn mpls number mh-mode keyword</i>
Tree	<i>mh-mode</i>
Description	<p>This command configures the multihoming mode for BGP-EVPN. Users can configure only one network instance for the service.</p> <p>If a provider tunnel is enabled for the service instance, this command must be configured using the network option.</p>
Options	access, network
Default	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group ID
Context	configure <i>service vpls service-name bgp-evpn mpls number oper-group reference</i>
Tree	<i>oper-group</i>

Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-next-hop

Synopsis	Enter the route-next-hop context
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop
Tree	route-next-hop
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	configure service vpls <i>service-name</i> bgp-evpn mpls <i>number</i> route-next-hop system-ipv4
Tree	system-ipv4

Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-ipv6



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	configure <i>service vpls service-name bgp-evpn mpls number route-next-hop system-ipv6</i>
Tree	<i>system-ipv6</i>
Notes	The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-tunnel-encap

Synopsis	Enter the send-tunnel-encap context
Context	configure <i>service vpls service-name bgp-evpn mpls number send-tunnel-encap</i>
Tree	<i>send-tunnel-encap</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	configure <i>service vpls service-name bgp-evpn mpls number send-tunnel-encap mpls boolean</i>
Tree	<i>mpls</i>
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-over-udp *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>send-tunnel-encap</i> <i>mpls-over-udp</i> <i>boolean</i>
Tree	<i>mpls-over-udp</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon-group *reference*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>split-horizon-group</i> <i>reference</i>
Tree	<i>split-horizon-group</i>
Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>split-horizon-group</i> <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

per-pe-etree-leaf

Synopsis	Enable the per-pe-etree-leaf context
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>bgp-evpn</i> <i>per-pe-etree-leaf</i>

Tree	per-pe-etree-leaf
Description	<p>Commands in this context configure the PE as an E-Tree leaf PE for the service.</p> <p>When this command is configured, the PE operates as a leaf PE for the service. As a result, EVPN BUM bindings are not created toward remote PEs that are also configured as E-Tree leaf PEs. In addition, received EVPN MAC/IP Advertisement routes with the leaf flag set are not installed in the service FDB unless they convey an ESI that matches a local ESI on an operationally up SAP, or the configure service vpls bgp-evpn per-pe-etree-leaf blackhole-non-local-leaf-macs command is enabled.</p>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

blackhole-non-local-leaf-macs *boolean*

Synopsis	Blackhole non-local leaf MAC addresses
Context	configure service vpls <i>service-name</i> bgp-evpn per-pe-etree-leaf blackhole-non-local-leaf-macs <i>boolean</i>
Tree	blackhole-non-local-leaf-macs
Description	<p>When configured to true, EVPN MAC addresses learned from EVPN MAC and IP advertisement routes marked with the leaf flag and originating from remote PEs are installed in the FDB as blackhole MACs. EVPN MACs learned from non-zero ESI MAC and IP routes that are marked as leaf and associated with a local ES SAP are installed normally.</p> <p>When configured to false, the router installs EVPN MACs learned from non-zero ESI MAC and IP routes marked as a leaf and associated with a local ES SAP, while all other leaf-flagged EVPN MACs received from remote PEs are not installed in the FDB.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

routes

Synopsis	Enter the routes context
Context	configure service vpls <i>service-name</i> bgp-evpn routes
Tree	routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incl-mcast

Synopsis	Enter the incl-mcast context
Context	configure service vpls service-name bgp-evpn routes incl-mcast
Tree	incl-mcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-ingress-replication *boolean*

Synopsis	BGP EVPN IMET-IR route advertisement
Context	configure service vpls service-name bgp-evpn routes incl-mcast advertise-ingress-replication <i>boolean</i>
Tree	advertise-ingress-replication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-l2-attributes *boolean*

Synopsis	Advertise Layer 2 attributes
Context	configure service vpls service-name bgp-evpn routes incl-mcast advertise-l2-attributes <i>boolean</i>
Tree	advertise-l2-attributes
Description	When configured to true , the router advertises the Layer 2 Attributes Extended Community including:

- the service MTU in the Layer 2 MTU field
- the F bit, which is set to 1 if the **hash-label** command is set to true (in the **configure service vpls bgp-evpn mpls** context); otherwise, the F bit is set to 0
- the C bit, which is set to 1 if the **control-word** command is set to true (in the **configure service vpls bgp-evpn mpls** context); otherwise, the C bit is set to 0

The router compares the received Layer 2 MTU from a peer with the local service MTU. If there is a mismatch, the operation state of the EVPN destination is set to down, except if the **configure service vpls bgp-evpn ignore-mtu-mismatch** command is set to **true**.

A mismatch between the received C bit and the local **control-word** setting (in the **configure service vpls bgp-evpn mpls** context) results in the operational state of the EVPN destination being set to down.

A mismatch between the received F bit and the local F bit (via the hash label configuration) results in the operational state of the EVPN destination being set to down.

When configured to **false**, the Layer 2 Attributes Extended Community is not advertised with the Inclusive Multicast Ethernet Tag route for the service.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix

Synopsis	Enter the ip-prefix context
Context	configure service vpls service-name bgp-evpn routes ip-prefix
Tree	ip-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise boolean

Synopsis	Advertise IP prefixes
Context	configure service vpls service-name bgp-evpn routes ip-prefix advertise boolean
Tree	advertise
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-id domain-id

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure service vpls service-name bgp-evpn routes ip-prefix domain-id domain-id
Tree	domain-id
Description	This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i> . Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

String format	'domain-id' must be global-field:local-field (uint32:uint16 range)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-direct-interface-host *boolean*

Synopsis	Advertise the interface host address in EVPN
Context	configure service vpls <i>service-name</i> bgp-evpn routes ip-prefix include-direct-interface-host <i>boolean</i>
Tree	include-direct-interface-host
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure service vpls <i>service-name</i> bgp-evpn routes ip-prefix link-bandwidth
Tree	link-bandwidth
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure service vpls <i>service-name</i> bgp-evpn routes ip-prefix link-bandwidth advertise

Tree	advertise
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-dynamic-weight *number*

Synopsis	Maximum weight of the advertised evpn-iff route
Context	configure service vpls service-name bgp-evpn routes ip-prefix link-bandwidth advertise max-dynamic-weight <i>number</i>
Tree	max-dynamic-weight
Range	1 to 128
Default	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight (*number* | *keyword*)

Synopsis	Weight of the advertised evpn-iff route
Context	configure service vpls service-name bgp-evpn routes ip-prefix link-bandwidth advertise weight (<i>number</i> <i>keyword</i>)
Tree	weight
Range	1 to 128
Options	dynamic
Default	dynamic
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Enable weighted ECMP
Context	configure service vpls service-name bgp-evpn routes ip-prefix link-bandwidth weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mac-ip

Synopsis Enter the **mac-ip** context

Context **configure** [service vpls service-name bgp-evpn routes mac-ip](#)

Tree [mac-ip](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise *boolean*

Synopsis Advertise BGP-EVPN MAC/IP routes

Context **configure** [service vpls service-name bgp-evpn routes mac-ip advertise boolean](#)

Tree [advertise](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

arp-nd-extended-community *boolean*

Synopsis Enable ARP/ND extended community

Context **configure** [service vpls service-name bgp-evpn routes mac-ip arp-nd-extended-community boolean](#)

Tree [arp-nd-extended-community](#)

Description When configured to **true**, the system advertises the RFC9047 ARP/ND extended community along with the MAC/IP routes advertised for local static and dynamic proxy ARP or ND entries. The system also processes the ARP/ND extended community and selects the ARP or ND entries based on the immutable flag.

When configured to **false**, the system does not advertise the RFC9047 ARP/ND extended community.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

arp-nd-only-with-fdb-advertisement *boolean*

Synopsis	Advertise ARP/ND entries if local MAC is in the FDB
Context	configure service vpls <i>service-name</i> bgp-evpn routes mac-ip arp-nd-only-with-fdb-advertisement <i>boolean</i>
Tree	arp-nd-only-with-fdb-advertisement
Description	<p>When configured to true, the router advertises local ARP/ND entries of VPRN interfaces using this VPLS in this BGP-EVPN service when the corresponding local MAC is programmed in the FDB.</p> <p>When configured to false, the router does not advertise local ARP/ND entries.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cfm-mac *boolean*

Synopsis	Enable advertisement and withdrawal of MAC address
Context	configure service vpls <i>service-name</i> bgp-evpn routes mac-ip cfm-mac <i>boolean</i>
Tree	cfm-mac
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-mac *boolean*

Synopsis	Enable advertisement of unknown MAC route in BGP
Context	configure service vpls <i>service-name</i> bgp-evpn routes mac-ip unknown-mac <i>boolean</i>
Tree	unknown-mac
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sel-mcast

Synopsis	Enter the sel-mcast context
Context	configure service vpls <i>service-name</i> bgp-evpn routes sel-mcast

Tree	sel-mcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise Selective Multicast Ethernet Tag routes
Context	configure service vpls <i>service-name</i> bgp-evpn routes sel-mcast advertise <i>boolean</i>
Tree	advertise
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-aware-bundle-eth-tag *number*

Synopsis	Ethernet tag associated with VPLS service
Context	configure service vpls <i>service-name</i> bgp-evpn routes vlan-aware-bundle-eth-tag <i>number</i>
Tree	vlan-aware-bundle-eth-tag
Description	<p>This command configures the Ethernet Tag ID in the EVPN routes for control-plane interoperability mode with VLAN-aware bundle services. The configuration of a non-default value requires the previous configuration of a VLAN-aware bundle name on the service.</p> <p>When set to a non-zero value, the EVPN routes advertised for the VPLS service are advertised with this value into the Ethernet Tag ID field of the routes.</p> <p>On reception of EVPN routes with non-zero Ethernet Tag ID, BGP imports the routes based on the import route target as usual. However, the system checks the received Ethernet Tag ID field and only processes those routes whose Ethernet Tag ID matches the local VLAN-aware bundle Ethernet Tag ID.</p>
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-aware-bundle *named-item*

Synopsis	VLAN aware bundle name
Context	configure service vpls <i>service-name</i> bgp-evpn vlan-aware-bundle <i>named-item</i>

Tree	vlan-aware-bundle
Description	This command configures the name that identifies a group of bundled VPLS services (broadcast domains). This name allows the user to execute show commands that are relevant to all the broadcast domains in a VLAN-aware bundle service group.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-mh-site [[site-name](#)] *named-item*

Synopsis	Enter the bgp-mh-site list instance
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i>
Tree	bgp-mh-site
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[site-name] *named-item*

Synopsis	Name for the specific site
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i>
Tree	bgp-mh-site
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

activation-timer *number*

Synopsis	Time that the local sites are in standby status, waiting for BGP updates
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Units	seconds

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the VPLS BGP multi-homing site
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failed-threshold (*number* | *keyword*)

Synopsis	Threshold for the site to be declared down
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> failed-threshold (<i>number</i> <i>keyword</i>)
Tree	failed-threshold
Range	1 to 1000
Options	all
Default	all
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Site ID
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> id <i>number</i>
Tree	id
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mesh-sdp-binds

Synopsis	Specify if a mesh-sdp-binding is associated with this site
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> mesh-sdp-binds
Tree	mesh-sdp-binds
Notes	The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-down-timer number

Synopsis	Minimum downtime for BGP multi-homing site after transition from up to down
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> min-down-timer <i>number</i>
Tree	min-down-timer
Range	0 to 100
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group reference

Synopsis	Operational group to monitor
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Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>bgp-mh-site</i> <i>named-item</i> <i>monitor-oper-group</i> <i>reference</i>
Tree	<i>monitor-oper-group</i>
Reference	configure <i>service</i> <i>oper-group</i> <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap sap

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>bgp-mh-site</i> <i>named-item</i> <i>sap</i> <i>sap</i>
Tree	<i>sap</i>
String length	1 to 45
Notes	The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

shg-name named-item

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SHG name to be associated with the site
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>bgp-mh-site</i> <i>named-item</i> <i>shg-name</i> <i>named-item</i>
Tree	<i>shg-name</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp *sdp-bind-id***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SDP associated with the site
Context	configure service vpls <i>service-name</i> bgp-mh-site <i>named-item</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-vpls

Synopsis	Enable the bgp-vpls context
Context	configure service vpls <i>service-name</i> bgp-vpls
Tree	bgp-vpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the BGP-VPLS instance
Context	configure service vpls <i>service-name</i> bgp-vpls admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-ve-id *number*

Synopsis	Maximum vpls-edge id for BGP-VPLS
Context	configure service vpls <i>service-name</i> bgp-vpls maximum-ve-id <i>number</i>
Tree	maximum-ve-id
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ve

Synopsis	Enter the ve context
Context	configure service vpls <i>service-name</i> bgp-vpls ve
Tree	ve
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id *number*

Synopsis	VPLS edge ID
Context	configure service vpls <i>service-name</i> bgp-vpls ve id <i>number</i>
Tree	id
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *named-item*

Synopsis	VPLS Edge instance name
Context	configure service vpls <i>service-name</i> bgp-vpls ve name <i>named-item</i>
Tree	name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

customer *reference*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service vpls <i>service-name</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>customer-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint [*name*] *named-item*

Synopsis	Enter the endpoint list instance
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i>
Tree	endpoint
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Service endpoint name
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i>
Tree	endpoint
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-on-mesh-failure *boolean*

Synopsis	Enable blocking after the endpoints are in a down state
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> block-on-mesh-failure <i>boolean</i>
Tree	block-on-mesh-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> fdb

Tree	fdb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with this endpoint
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> fdb auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-pinning *boolean*

Synopsis	Activate MAC address pinning on this endpoint
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this endpoint.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared. Packets with unknown source MAC addresses are still forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p>

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the endpoint uses the global MAC learning limitations.

Range	1 to 511999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Action taken after a relearn request for protected MAC
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Description	This command configures how the system handles relearn requests for protected MAC addresses.
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-standby-signaling *boolean*

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> ignore-standby-signaling <i>boolean</i>
Tree	ignore-standby-signaling
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-endpoint [**mc-ep-id**] *number*

Synopsis	Enter the mc-endpoint list instance
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> mc-endpoint <i>number</i>
Tree	mc-endpoint
Max. instances	1

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mc-ep-id] *number*

Synopsis	MC-EP ID
Context	configure <i>service vpls service-name endpoint named-item mc-endpoint number</i>
Tree	<i>mc-endpoint</i>
Description	This command configures the identifier associated with the MC-EP. The ID must be the same on both MC-EP peers.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-ep-peer

Synopsis	Enter the mc-ep-peer context
Context	configure <i>service vpls service-name endpoint named-item mc-endpoint number mc-ep-peer</i>
Tree	<i>mc-ep-peer</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *named-item*

Synopsis	Name of the MC-EP peer
Context	configure <i>service vpls service-name endpoint named-item mc-endpoint number mc-ep-peer name named-item</i>
Tree	<i>name</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: name or peer-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-address *reference*

Synopsis	IP address of the MC-EP peer
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> mc-endpoint <i>number</i> mc-ep-peer peer-address <i>reference</i>
Tree	peer-address
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	The following elements are part of a choice: name or peer-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-standby-signaling *boolean*

Synopsis	Do not send pseudowire standby bit to TLDP peer when specified spoke SDP is selected as standby
Context	configure service vpls <i>service-name</i> endpoint <i>named-item</i> suppress-standby-signaling <i>boolean</i>
Tree	suppress-standby-signaling
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>service-name</i> fdb
Tree	fdb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-unknown *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	configure service vpls <i>service-name</i> fdb discard-unknown <i>boolean</i>
Tree	discard-unknown
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service vpls <i>service-name</i> fdb mac-learning
Tree	mac-learning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	configure service vpls <i>service-name</i> fdb mac-learning aging <i>boolean</i>
Tree	aging
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	configure service vpls <i>service-name</i> fdb mac-learning learning <i>boolean</i>
Tree	learning
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-age-time *number*

Synopsis	Aging time for locally learned MAC addresses
Context	configure service vpls <i>service-name</i> fdb mac-learning local-age-time <i>number</i>
Tree	local-age-time
Description	<p>This command configures the aging time for locally learned MAC addresses in the forwarding database (FDB) for the Virtual Private LAN Service (VPLS) instance. In a VPLS service, MAC addresses are associated with a Service Access Point (SAP) or a Service Destination Point (SDP). MACs associated with a SAP are classified as local MACs, and MACs associated with an SDP are remote MACs. In each VPLS service instance, there are independent aging timers for locally learned MAC and remotely learned MAC entries in the FDB.</p> <p>As in a Layer 2 switch, learned MACs can be aged out if no packets are sourced from the MAC address for a period of time (the aging time).</p>
Range	60 to 86400
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-age-time *number*

Synopsis	Aging time for remotely learned MAC addresses
Context	configure service vpls <i>service-name</i> fdb mac-learning remote-age-time <i>number</i>
Tree	remote-age-time
Description	<p>This command configures the aging time for remotely learned MAC addresses in the forwarding database (FDB) for the Virtual Private LAN Service (VPLS) instance. In a VPLS service, MAC addresses are associated with a Service Access Point (SAP) or a Service Destination Point (SDP). MACs associated with a SAP are classified as local MACs, and MACs associated with an SDP are remote MACs. In each VPLS service</p>

instance, there are independent aging timers for locally learned MAC and remotely learned MAC entries in the FDB.

As in a Layer 2 switch, learned MACs can be aged out if no packets are sourced from the MAC address for a period of time (the aging time). To reduce the amount of signaling required between switches, configure this time larger than the **local-age-time** command.

Range	60 to 86400
Default	900
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-move

Synopsis	Enter the mac-move context
Context	configure service vpls service-name fdb mac-move
Tree	mac-move
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of MAC move
Context	configure service vpls service-name fdb mac-move admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down-time *number*

Synopsis	Wait time before re-enabling disabled SAP
Context	configure service vpls service-name fdb mac-move hold-down-time number
Tree	hold-down-time
Range	0 to 600
Units	seconds

Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

move-frequency *number*

Synopsis	Maximum rate MACs can be re-learned in the VPLS service
Context	configure service vpls <i>service-name</i> fdb mac-move move-frequency <i>number</i>
Tree	move-frequency
Range	1 to 10
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-cumulative-factor *number*

Synopsis	Factor for MAC-relearn periods for MAC-relearn rate
Context	configure service vpls <i>service-name</i> fdb mac-move primary-cumulative-factor <i>number</i>
Tree	primary-cumulative-factor
Range	3 to 10
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-count (*number* | *keyword*)

Synopsis	Number of retries for re-enabling the SAP or SDP
Context	configure service vpls <i>service-name</i> fdb mac-move retry-count (<i>number</i> <i>keyword</i>)
Tree	retry-count
Range	1 to 255
Options	unlimited
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *reference*

Synopsis	Enter the sap list instance
Context	configure service vpls <i>service-name</i> fdb mac-move sap <i>reference</i>
Tree	sap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *reference*

Synopsis	SAP identifier
Context	configure service vpls <i>service-name</i> fdb mac-move sap <i>reference</i>
Tree	sap
Reference	configure service vpls <i>service-name</i> sap <i>sap</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *keyword*

Synopsis	Primary or secondary port level
Context	configure service vpls <i>service-name</i> fdb mac-move sap <i>reference</i> level <i>keyword</i>
Tree	level
Options	primary, secondary
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary-cumulative-factor *number*

Synopsis	Number of periods to measure mac-relearn rate
Context	configure service vpls <i>service-name</i> fdb mac-move secondary-cumulative-factor <i>number</i>
Tree	secondary-cumulative-factor
Range	2 to 9

Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *reference*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vpls <i>service-name</i> fdb mac-move spoke-sdp <i>reference</i>
Tree	spoke-sdp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] *reference*

Synopsis	SDP binding ID
Context	configure service vpls <i>service-name</i> fdb mac-move spoke-sdp <i>reference</i>
Tree	spoke-sdp
Reference	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level *keyword*

Synopsis	Primary or secondary port level
Context	configure service vpls <i>service-name</i> fdb mac-move spoke-sdp <i>reference</i> level <i>keyword</i>
Tree	level
Options	primary, secondary
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-subnet-length *number*

Synopsis	Number of bits performing MAC learning or MAC switching
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Context	configure service vpls <i>service-name</i> fdb mac-subnet-length <i>number</i>
Tree	mac-subnet-length
Range	24 to 48
Default	48
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selective-learning *boolean*

Synopsis	Allocate FDB entries on selectively learned line cards
Context	configure service vpls <i>service-name</i> fdb selective-learning <i>boolean</i>
Tree	selective-learning
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-mac

Synopsis	Enter the static-mac context
Context	configure service vpls <i>service-name</i> fdb static-mac
Tree	static-mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [[mac-address](#)] *mac-unicast-address-no-zero*

Synopsis	Enter the mac list instance
Context	configure service vpls <i>service-name</i> fdb static-mac mac mac-unicast-address-no-zero
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mac-address] *mac-unicast-address-no-zero*

Synopsis	Static MAC address to SAP/SDP-binding or black-hole
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Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero</i>
Tree	mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a static FDB entry for the MAC address to black-hole traffic
Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero</i> blackhole
Tree	blackhole
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint associated with the MAC
Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero</i> endpoint <i>reference</i>
Tree	endpoint
Reference	configure service vpls <i>service-name</i> endpoint <i>named-item</i>
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mesh-sdp *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mesh SDP bind associated with this MAC
Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero</i> mesh-sdp <i>reference</i>
Tree	mesh-sdp
Reference	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i>
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Entity to be monitored to decide whether this entry can be installed in the FDB
Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero</i> monitor <i>keyword</i>
Tree	monitor
Options	none, forward-status
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP associated with this MAC
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Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero sap reference</i>
Tree	sap
Reference	configure service vpls <i>service-name</i> sap sap
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp *reference*

	WARNING: Modifying this element recreates the parent element automatically for the new value to take effect.
Synopsis	Spoke SDP bind associated with this MAC
Context	configure service vpls <i>service-name</i> fdb static-mac mac <i>mac-unicast-address-no-zero spoke-sdp reference</i>
Tree	spoke-sdp
Reference	configure service vpls <i>service-name</i> spoke-sdp sdp-bind-id
Notes	The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

table

Synopsis	Enter the table context
Context	configure service vpls <i>service-name</i> fdb table
Tree	table
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-wmark *number*

Synopsis	High watermark for the FDB table
Context	configure service vpls <i>service-name</i> fdb table high-wmark <i>number</i>

Tree	high-wmark
Range	0 to 100
Default	95
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-wmark *number*

Synopsis	Low watermark for the FDB table
Context	configure service vpls <i>service-name</i> fdb table low-wmark <i>number</i>
Tree	low-wmark
Range	0 to 100
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Maximum MAC entries in the FDB
Context	configure service vpls <i>service-name</i> fdb table size <i>number</i>
Tree	size
Range	1 to 511999
Default	250
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls <i>service-name</i> igmp-snooping
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of snooping
Context	configure service vpls <i>service-name</i> igmp-snooping admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>service-name</i> igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	1 to 65535
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-source-address (*keyword* | *ipv4-address*)

Synopsis	Source address for IGMP queries
Context	configure service vpls <i>service-name</i> igmp-snooping query-source-address (<i>keyword</i> <i>ipv4-address</i>)
Tree	query-source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Options	system
Default	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

report-source-address *ipv4-address*

Synopsis	Source IP address used when generating IGMP reports
Context	configure service vpls <i>service-name</i> igmp-snooping report-source-address <i>ipv4-address</i>
Tree	report-source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	1 to 255
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-l2vpn-mtu-mismatch *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	configure service vpls <i>service-name</i> ignore-l2vpn-mtu-mismatch <i>boolean</i>
Tree	ignore-l2vpn-mtu-mismatch
Description	<p>When configured to true, the router ignores the value of the Layer 2 MTU in the Layer 2 Info Extended Community received in a BGP update message or the value of the MTU interface parameter received in an LDP label mapping message against the local service MTU or locally signaled MTU. It may, therefore, bring up the VPLS service regardless of any MTU mismatch.</p> <p>When configured to false, an MTU mismatch prevents the system from bringing up a VPLS service.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *[interface-name] interface-name*

Synopsis	Enter the interface list instance
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *very-long-description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

hold-time

Synopsis Enter the **hold-time** context

Context **configure** *service vpls service-name interface interface-name hold-time*

Tree *hold-time*

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipv4

Synopsis Enter the **ipv4** context

Context **configure** *service vpls service-name interface interface-name hold-time ipv4*

Tree *ipv4*

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

down

Synopsis Enter the **down** context

Context **configure** *service vpls service-name interface interface-name hold-time ipv4 down*

Tree *down*

Description Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

up

Synopsis	Enter the up context
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds

Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

static-neighbor [[ipv4-address](#)] *ipv4-address*

Synopsis	Enter the static-neighbor list instance
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[[ipv4-address](#)] *ipv4-address*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i> mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

timeout *number*

Synopsis	ARP timeout value to determine how long an ARP entry remains in the ARP cache
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Range	0 to 65535
Units	seconds
Default	14400
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

primary

Synopsis	Enable the primary context
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 primary
Tree	primary
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

address *ipv4-address*

Synopsis	IP address of the interface
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 primary address <i>ipv4-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 31
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

mac *mac-unicast-address*

Synopsis	MAC address for the interface
Context	configure service vpls <i>service-name</i> interface <i>interface-name</i> mac <i>mac-unicast-address</i>
Tree	mac
Description	This command assigns a specific MAC address to an IP interface.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

isid-policy

Synopsis	Enter the isid-policy context
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Context	configure service vpls <i>service-name</i> isid-policy
Tree	isid-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[range-entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure service vpls <i>service-name</i> isid-policy entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[range-entry-id] *number*

Synopsis	ISID policy entry ID
Context	configure service vpls <i>service-name</i> isid-policy entry <i>number</i>
Tree	entry
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-local *boolean*

Synopsis	Advertise locally-defined I-VPLS ISIDs or static ISIDs
Context	configure service vpls <i>service-name</i> isid-policy entry <i>number</i> advertise-local <i>boolean</i>
Tree	advertise-local
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enter the range context
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Context	configure service vpls <i>service-name</i> isid-policy entry <i>number range</i>
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

Synopsis	Upper bound of the ISID range
Context	configure service vpls <i>service-name</i> isid-policy entry <i>number range</i> end <i>number</i>
Tree	end
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the ISID range
Context	configure service vpls <i>service-name</i> isid-policy entry <i>number range</i> start <i>number</i>
Tree	start
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-def-mcast *boolean*

Synopsis	Use default multicast tree to propagate ISIS range
Context	configure service vpls <i>service-name</i> isid-policy entry <i>number</i> use-def-mcast <i>boolean</i>
Tree	use-def-mcast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
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Context	configure service vpls <i>service-name</i> load-balancing
Tree	load-balancing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	configure service vpls <i>service-name</i> load-balancing per-service-hashing <i>boolean</i>
Tree	per-service-hashing
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

m-vpls *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Specify whether this is a management VPLS
Context	configure service vpls <i>service-name</i> m-vpls <i>boolean</i>
Tree	m-vpls
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-flush

Synopsis	Enter the mac-flush context
Context	configure service vpls <i>service-name</i> mac-flush
Tree	mac-flush
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tldp

Synopsis	Enter the tldp context
Context	configure service vpls <i>service-name</i> mac-flush tldp
Tree	tldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate *boolean*

Synopsis	Propagate MAC flush messages received from the T-LDP
Context	configure service vpls <i>service-name</i> mac-flush tldp propagate <i>boolean</i>
Tree	propagate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-on-failure *boolean*

Synopsis	Send MAC withdraw message on SAP/Spoke-SDP failure
Context	configure service vpls <i>service-name</i> mac-flush tldp send-on-failure <i>boolean</i>
Tree	send-on-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-protect

Synopsis	Enter the mac-protect context
Context	configure service vpls <i>service-name</i> mac-protect
Tree	mac-protect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [**mac-address**] *mac-address*

Synopsis	Add a list entry for mac
Context	configure service vpls <i>service-name</i> mac-protect mac <i>mac-address</i>
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mac-address] *mac-address*

Synopsis	Protected MAC address
Context	configure service vpls <i>service-name</i> mac-protect mac <i>mac-address</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv6-snooping-scope *keyword*

Synopsis	IPv6 multicast snooping scope
Context	configure service vpls <i>service-name</i> mcast-ipv6-snooping-scope <i>keyword</i>
Tree	mcast-ipv6-snooping-scope
Options	sg-based, mac-based
Default	mac-based
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcr-default-gtw

Synopsis	Enter the mcr-default-gtw context
Context	configure service vpls <i>service-name</i> mcr-default-gtw
Tree	mcr-default-gtw
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip *ipv4-unicast-address*

Synopsis	Multi-chassis ring default gateway IP address
Context	configure <i>service vpls service-name mcr-default-gtw ip ipv4-unicast-address</i>
Tree	<i>ip</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-address*

Synopsis	Multi-chassis ring default gateway MAC address
Context	configure <i>service vpls service-name mcr-default-gtw mac mac-address</i>
Tree	<i>mac</i>
Default	00:00:00:00:00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mesh-sdp [*sdp-bind-id*] *sdp-bind-id*

Synopsis	Enter the mesh-sdp list instance
Context	configure <i>service vpls service-name mesh-sdp sdp-bind-id</i>
Tree	<i>mesh-sdp</i>
Description	<p>Commands in this context bind a VPLS service to an existing SDP.</p> <p>Mesh SDPs bound to a service are logically treated like a single bridge "port" for flooded traffic where flooded traffic received on any mesh SDP on the service is replicated to other "ports" (spoke SDPs and SAPs) and not transmitted on any mesh SDPs.</p> <p>Note: This command creates a binding between a service and an SDP. The SDP has an operational state that determines the operational state of the SDP within the service. For example, if the SDP is administratively or operationally down, the SDP for the service is down.</p> <p>The SDP must already be defined in the configure service sdp context to associate the SDP with an Epipe or VPLS service.</p> <p>SDPs must be explicitly associated and bound to a service. If an SDP is not bound to a service, no far-end router devices can participate in the service.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis SDP binding ID

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id*

Tree [mesh-sdp](#)

String length 3 to 16

String format 'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

accounting-policy *reference*

Synopsis Policy to collect accounting statistics

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [accounting-policy](#) *reference*

Tree [accounting-policy](#)

Reference **configure** [log accounting-policy](#) *number*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adv-service-mtu *number*

Synopsis Advertise service MTU value

Context	configure service vpls service-name mesh-sdp sdp-bind-id adv-service-mtu number
Tree	adv-service-mtu
Description	<p>This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP. The router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.</p> <p>This command cannot be configured on a spoke-SDP that is bound to an SDP with the adv-mtu-override command.</p>
Range	0 to 9782
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service vpls service-name mesh-sdp sdp-bind-id collect-stats boolean
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure service vpls service-name mesh-sdp sdp-bind-id control-word boolean
Tree	control-word
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls service-name mesh-sdp sdp-bind-id description description
Tree	description
String length	1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dhcp

Synopsis Enter the **dhcp** context

Context **configure** **service** **vpls** *service-name* **mesh-sdp** *sdp-bind-id* **dhcp**

Tree **dhcp**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** **service** **vpls** *service-name* **mesh-sdp** *sdp-bind-id* **dhcp** **description** *description*

Tree **description**

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

snoop *boolean*

Synopsis Allow DHCP snooping of DHCP messages on the SAP or SDP

Context **configure** **service** **vpls** *service-name* **mesh-sdp** *sdp-bind-id* **dhcp** **snoop** *boolean*

Tree **snoop**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dhcp6

Synopsis Enter the **dhcp6** context

Context **configure** **service** **vpls** *service-name* **mesh-sdp** *sdp-bind-id* **dhcp6**

Tree	dhcp6
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> dhcp6 description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

ldra

Synopsis	Enable the ldra context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> dhcp6 ldra
Tree	ldra
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

interface-type *keyword*

Synopsis	LDRA interface type
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> dhcp6 ldra interface-type <i>keyword</i>
Tree	interface-type
Description	This command configures this end point as a client-facing or network-facing interface. Spoke-SDP bindings, mesh-SDP bindings, and BGP EVPN service tunnels must be configured as a network-facing interface.
Options	client-facing – Untrusted client-facing interface network-facing – Network-facing interface
Notes	This element is mandatory.
Introduced	26.7.R1

Platforms 7705 SAR Gen 2

egress

Synopsis Enter the **egress** context

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [egress](#)

Tree [egress](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter

Synopsis Enter the **filter** context

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [egress](#) [filter](#)

Tree [filter](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [egress](#) [filter](#) [ip](#) *reference*

Tree [ip](#)

Reference **configure** [filter](#) [ip-filter](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [egress](#) [filter](#) [ipv6](#) *reference*

Tree [ipv6](#)

Reference **configure** [filter](#) [ipv6-filter](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mfib-allowed-mda-destinations

Synopsis	Enter the mfib-allowed-mda-destinations context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mda [[mda-id](#)] *slot-mda*

Synopsis	Add a list entry for mda
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress mfib-allowed-mda-destinations mda <i>slot-mda</i>
Tree	mda
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mda-id] *slot-mda*

Synopsis	MFIB allowed MDA destination
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress mfib-allowed-mda-destinations mda <i>slot-mda</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue-group instance ID
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group <i>instance number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm

Tree	eth-cfm
Description	Commands in this context configure the Ethernet CFM command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep [md-admin-name reference](#) [ma-admin-name reference](#) [mep-id number](#)

Synopsis	Enter the mep list instance
Context	configure service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance. A MEP created at the VPLS service level, using the configure service vpls eth-cfm command, creates a virtual MEP.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name reference

Synopsis	Maintenance Domain (MD) name
Context	configure service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain admin-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name reference

Synopsis	Maintenance Association (MA) name
Context	configure service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain admin-name association admin-name
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ais

Synopsis	Enable the ais context
Context	configure service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Description	Commands in this context enable the reception of AIS messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure <i>service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number</i>
Tree	<i>client-meg-level</i>
Description	This command configures the client Maintenance Entity Group (MEG) level to use for AIS message generation. One restriction is that the client MEG level must be higher than the local MEG level. Only the lowest client MEG level is used for facility MEPs.
Range	1 to 7
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure <i>service vpls service-name mesh-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean</i>
Tree	<i>interface-support</i>
Description	<p>When configured to true, the system enables the generation of AIS PDUs based on the associated endpoint state.</p> <p>AIS on Down MEPs triggers and clears based on the operational status of the entity it is configured on. If CCM is configured to true, transmission of the AIS PDU is based on either the nonoperational state of the entity or on any CCM defect conditions. AIS generation ceases if both the operational state is up and CCM has no defect conditions. If the MEP is not enabled with CCM, the operational state of the entity is the only consideration, assuming the command is present for the MEP.</p> <p>When configured to false, the generation of AIS PDUs is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Transmission interval for AIS messages
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Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i>
Tree	interval
Range	1 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Options	all-def – Generate AIS frame for any defect in CCM state machine mac-rem-err-xcon – Generate AIS frame for def-mac-status defect or higher
Default	all-def
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
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Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm *boolean*

Synopsis	Generate CCM messages
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Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
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Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which the MEP faces on the bridge port.
Options	down – Send ETH-CFM messages toward the MAC relay entity up – Send ETH-CFM messages away from the MAC relay entity
Default	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv – Use the interface TLV suspend-ccm – Suspend continuity check messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis	MAC address of the MEP
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> mac-address <i>mac-unicast-address-no-zero</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> fdb
Tree	fdb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic population of the MAC protect list
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> fdb auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> fdb auto-learn-mac-protect-exclude-list <i>reference</i>

Tree	auto-learn-mac-protect-exclude-list
Description	<p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
Reference	configure service mac-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-pinning *boolean*

Synopsis	MAC address pinning in active status
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Action taken after a relearn request for protected MAC
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Description	This command configures how the system handles relearn requests for protected MAC addresses.
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-vc-forwarding *keyword*

Synopsis	VLAN tag processing action
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> force-vc-forwarding <i>keyword</i>

Tree	force-vc-forwarding
Description	<p>This command configures the VLAN tag processing used on the service.</p> <p>The vlan option configures the router to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag, which is sent in the customer frame to the EVPN destinations.</p> <p>The qinq-c-tag-c-tag option configures the router to pushes two tags with the same value derived from the inner service delimiting tag. At network ingress, two VLAN tags are extracted at most and the C-tag and S-tag p/de bits are propagated to the egress SAPs.</p> <p>The qinq-s-tag-c-tag option configures the router to push two tags that are copied from the QinQ service-delimiting VLAN values and may be different. At network ingress, two VLAN tags are extracted at most and the p/de bits are propagated to the egress SAP service-delimiting S-tag and C-tag respectively.</p>
Options	vlan – Push VLAN ID and 802.1p bits of service-delimiting qtag qinq-c-tag-c-tag – Push two tags identical to inner service-delimiting tag qinq-s-tag-c-tag – Push two tags based on QinQ service-delimiting values
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label

Synopsis	Enable the hash-label context
Context	configure service vpls service-name mesh-sdp sdp-bind-id hash-label
Tree	hash-label
Description	<p>Commands in this context configure the use of hash labels for egress datapaths.</p> <p>For information about hash-label handling, see the "Hash label" section of the <i>7705 SAR Gen 2 MPLS Guide</i>.</p>
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	configure service vpls service-name mesh-sdp sdp-bind-id hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.

The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

igmp-snooping

Synopsis Enter the **igmp-snooping** context
Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [igmp-snooping](#)
Tree [igmp-snooping](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

fast-leave *boolean*

Synopsis Allow IGMP fast leave processing
Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [igmp-snooping fast-leave](#) *boolean*
Tree [fast-leave](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

import-policy *reference*

Synopsis Import policy that filters IGMP packets
Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [igmp-snooping import-policy](#) *reference*
Tree [import-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *named-item-64*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis Maximum group source combinations

Context	configure service vpls service-name mesh-sdp sdp-bind-id igmp-snooping maximum-number-group-sources number
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups number

Synopsis	Maximum groups allowed
Context	configure service vpls service-name mesh-sdp sdp-bind-id igmp-snooping maximum-number-groups number
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-sources number

Synopsis	Maximum sources that are allowed per group
Context	configure service vpls service-name mesh-sdp sdp-bind-id igmp-snooping maximum-number-sources number
Tree	maximum-number-sources
Range	1 to 1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrouter-port boolean

Synopsis	Operate port as a multicast router port
Context	configure service vpls service-name mesh-sdp sdp-bind-id igmp-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping static
Tree	static

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

group [[group-address](#)] *ipv4-multicast-address*

Synopsis Enter the **group** list instance
 Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [igmp-snooping](#) **static group** *ipv4-multicast-address*
 Tree [group](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[group-address] *ipv4-multicast-address*

Synopsis Group address of static IGMP multicast channel
 Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [igmp-snooping](#) **static group** *ipv4-multicast-address*
 Tree [group](#)
 Description This command configures an address that receives data on an interface. The IP address must be unique for each static group.
 String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

source [[source-address](#)] *ipv4-unicast-address*

Synopsis Add a list entry for **source**
 Context **configure** [service vpls](#) *service-name* [mesh-sdp](#) *sdp-bind-id* [igmp-snooping](#) **static group** *ipv4-multicast-address* [source](#) *ipv4-unicast-address*
 Tree [source](#)
 Notes The following elements are part of a mandatory choice: **source** or **starg**.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping static group <i>ipv4-multicast-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version keyword

Synopsis	IGMP protocol version
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> igmp-snooping version <i>keyword</i>
Tree	version
Options	1, 2, 3
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
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Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress qos

Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group instance <i>number</i>

Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping
Tree	mld-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping mrrouter-port <i>boolean</i>
Tree	mrrouter-port

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds

Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-address](#)] *ipv6-multicast-address*

Synopsis	Enter the group list instance
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping static group <i>ipv6-multicast-address</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[group-address](#)] *ipv6-multicast-address*

Synopsis	Group address of multicast channel
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping static group <i>ipv6-multicast-address</i>
Tree	group
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> mld-snooping static group <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
Context	configure <i>service vpls service-name mesh-sdp sdp-bind-id mld-snooping static group ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure <i>service vpls service-name mesh-sdp sdp-bind-id mld-snooping static group ipv6-multicast-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version keyword

Synopsis	Version of MLD running on the SAP or SDP
Context	configure <i>service vpls service-name mesh-sdp sdp-bind-id mld-snooping</i> version keyword
Tree	version
Options	1, 2
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-type keyword**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> vc-type <i>keyword</i>
Tree	vc-type
Options	ether, vlan
Default	ether
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	configure service vpls <i>service-name</i> mesh-sdp <i>sdp-bind-id</i> vlan-vc-tag <i>number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mfib

Synopsis	Enter the mfib context
Context	configure service vpls <i>service-name</i> mfib
Tree	mfib
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

table

Synopsis	Enter the table context
Context	configure service vpls <i>service-name</i> mfib table
Tree	table
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high-wmark *number*

Synopsis	High watermark for the MFIB table
Context	configure service vpls <i>service-name</i> mfib table high-wmark <i>number</i>
Tree	high-wmark
Range	0 to 100
Default	95
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-wmark *number*

Synopsis	Low watermark for the MFIB table
Context	configure service vpls <i>service-name</i> mfib table low-wmark <i>number</i>
Tree	low-wmark
Range	0 to 100
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

size *number*

Synopsis	Maximum SG entries in the MFIB
Context	configure service vpls <i>service-name</i> mfib table size <i>number</i>
Tree	size
Range	1 to 40959
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls <i>service-name</i> mld-snooping
Tree	mld-snooping
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of snooping

Context **configure** [service vpls service-name mld-snooping admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

query-interval *number*

Synopsis Time between two consecutive host-query messages

Context **configure** [service vpls service-name mld-snooping query-interval](#) *number*

Tree [query-interval](#)

Range 1 to 65535

Units seconds

Default 125

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

query-source-address (*keyword* | *ipv6-address*)

Synopsis Source IP address used in MLD queries

Context **configure** [service vpls service-name mld-snooping query-source-address](#) (*keyword* | *ipv6-address*)

Tree [query-source-address](#)

Options system

Default system

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

report-source-address *ipv6-address*

Synopsis	Source IP address used when generating MLD reports
Context	configure service vpls <i>service-name</i> mld-snooping report-source-address <i>ipv6-address</i>
Tree	report-source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	1 to 255
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-arp

Synopsis	Enable the proxy-arp context
Context	configure service vpls <i>service-name</i> proxy-arp
Tree	proxy-arp
Description	Commands in this context configure proxy-ARP in a VPLS service.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the proxy
Context	configure service vpls <i>service-name</i> proxy-arp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

age-time (*number* | *keyword*)

Synopsis Aging timer for proxy entries, where entries are flushed upon timer expiry

Context **configure** *service vpls service-name proxy-arp age-time* (*number* | *keyword*)

Tree *age-time*

Range 60 to 86400

Units seconds

Options never

Default never

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

duplicate-detect

Synopsis Enter the **duplicate-detect** context

Context **configure** *service vpls service-name proxy-arp duplicate-detect*

Tree *duplicate-detect*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

anti-spoof-mac *mac-unicast-address-no-zero*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis MAC address to replace the proxy-ARP/ND offending entry's MAC

Context **configure** *service vpls service-name proxy-arp duplicate-detect anti-spoof-mac mac-unicast-address-no-zero*

Tree *anti-spoof-mac*

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hold-down-time (*number* | *keyword*)

Synopsis	Hold down time for a duplicate entry
Context	configure service vpls <i>service-name</i> proxy-arp duplicate-detect hold-down-time (<i>number</i> <i>keyword</i>)
Tree	hold-down-time
Range	2 to 60
Units	minutes
Options	max
Default	9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

num-moves *number*

Synopsis	Number of moves required to declare a duplicate entry
Context	configure service vpls <i>service-name</i> proxy-arp duplicate-detect num-moves <i>number</i>
Tree	num-moves
Range	3 to 10
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-blackhole *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	configure service vpls <i>service-name</i> proxy-arp duplicate-detect static-blackhole <i>boolean</i>
Tree	static-blackhole
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

window *number*

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
Context	configure service vpls <i>service-name</i> proxy-arp duplicate-detect window <i>number</i>
Tree	window
Range	1 to 15
Units	minutes
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-arp

Synopsis	Enter the dynamic-arp context
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp
Tree	dynamic-arp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address [[ipv4-address](#)] *ipv4-unicast-address*

Synopsis	Enter the ip-address list instance
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-address] *ipv4-unicast-address*

Synopsis	Proxy ARP IPv4 address
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-list *reference*

Synopsis	MAC list for the dynamic entry
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp ip-address <i>ipv4-unicast-address</i> mac-list <i>reference</i>
Tree	mac-list
Reference	configure service proxy-arp-nd mac-list list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolve-retry-time *number*

Synopsis	Frequency at which the resolve messages are sent
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp ip-address <i>ipv4-unicast-address</i> resolve-retry-time <i>number</i>
Tree	resolve-retry-time
Range	1 to 60
Units	minutes
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *reference*

Synopsis	Add a list entry for sap
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp ip-address <i>ipv4-unicast-address</i> sap <i>reference</i>
Tree	sap
Description	Commands in this context configure the proxy ARP or ND entry for creation when the ARP or neighbor advertisement (NA) packet for the configured IP address is received on the configured SAP, when configured under the dynamic-arp ip-address context. This command can be configured in combination with the mac-list for the entry, in which

case, the MAC of the ARP or NA message and the SAP on which the ARP or NA packet is received are both checked before creating the entry.

Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *reference*

Synopsis	SAP identifier
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-arp ip-address ipv4-unicast-address sap <i>reference</i>
Tree	sap
Reference	configure service vpls <i>service-name</i> sap <i>sap</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-populate *boolean*

Synopsis	Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context	configure service vpls <i>service-name</i> proxy-arp dynamic-populate <i>boolean</i>
Tree	dynamic-populate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	configure service vpls <i>service-name</i> proxy-arp evpn
Tree	evpn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flood

Synopsis	Enter the flood context
Context	configure service vpls <i>service-name</i> proxy-arp evpn flood
Tree	flood
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gratuitous-arp *boolean*

Synopsis	Flood GARP-requests/GARP-replies to the EVPN
Context	configure service vpls <i>service-name</i> proxy-arp evpn flood gratuitous-arp <i>boolean</i>
Tree	gratuitous-arp
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-arp-req *boolean*

Synopsis	Flood ARP-requests (with source squelching) if there is no active proxy-ARP entry for requested IP
Context	configure service vpls <i>service-name</i> proxy-arp evpn flood unknown-arp-req <i>boolean</i>
Tree	unknown-arp-req
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	configure service vpls <i>service-name</i> proxy-arp evpn route-tag <i>number</i>

Tree	route-tag
Range	0 1 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-local-es

Synopsis	Enter the evpn-local-es context
Context	configure service vpls <i>service-name</i> proxy-arp evpn-local-es
Tree	evpn-local-es
Description	Commands in this context configure EVPN local ESI information used by proxy-ARD and proxy-ND entries.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

advertise *boolean*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise EVPN local ES entries
Context	configure service vpls <i>service-name</i> proxy-arp evpn-local-es advertise <i>boolean</i>
Tree	advertise
Description	When configured to true , the router advertises EVPN local ES entries as MAC/IP advertisement routes with the proxy bit set.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Retention timer for EVPN local ES entries
Context	configure service vpls <i>service-name</i> proxy-arp evpn-local-es retention-timer <i>number</i>
Tree	retention-timer

Description	This command sets the retention timer for EVPN local ES entries, defining how long a proxy-ARP or proxy-ND entry is kept after the originating EVPN MAC/IP route is withdrawn.
Range	0 30 to 65535
Units	seconds
Default	0
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

flood

Synopsis	Enter the flood context
Context	configure service vpls <i>service-name</i> proxy-arp flood
Tree	flood
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

received-gratuitous-arp *boolean*

Synopsis	Allow GARP requests or replies to flood the service
Context	configure service vpls <i>service-name</i> proxy-arp flood received-gratuitous-arp <i>boolean</i>
Tree	received-gratuitous-arp
Description	<p>When configured to true, the system floods GARP requests and replies received on a SAP (or SDP-bind) to the service flood-list (which includes EVPN destinations and other SAPs and SDP-binds).</p> <p>The GARPs impacted by this command are identified by the sender IP address being equal to the target IP address and the MAC DA that is broadcast.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

received-unknown-arp-req *boolean*

Synopsis	Allow unknown ARP requests to flood the service
Context	configure service vpls <i>service-name</i> proxy-arp flood received-unknown-arp-req <i>boolean</i>
Tree	received-unknown-arp-req

Description	When configured to true , the unknown ARP requests received on a SAP (or SDP-bind) are flooded to the service flood-list (which includes EVPN destinations and other SAPs and SDP-binds). By default if there is no active proxy ARP entry for the requested IP address, the system floods ARP requests, including EVPN (with source squelching).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

process-arp-probes *boolean*

Synopsis	Enable replies to DAD ARP probes
Context	configure <i>service vpls service-name</i> <i>proxy-arp process-arp-probes boolean</i>
Tree	<i>process-arp-probes</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restrict-non-configured-ip-address



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the restrict-non-configured-ip-address context
Context	configure <i>service vpls service-name</i> <i>proxy-arp restrict-non-configured-ip-address</i>
Tree	<i>restrict-non-configured-ip-address</i>
Description	Commands in this context configure whether all the configured dynamic IP address entries are considered the only authorized entries in the proxy ARP or ND table. ARP or ND packets coming from a unauthorized sender IP are dropped. Therefore, unauthorized IP addresses are not learned in the proxy ARP or ND table, and ARP requests or neighbor solicitations (NS) coming from a unauthorized sender IP are not replied (unless the sponge-mac command option is configured).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sponge-mac *mac-unicast-address-no-zero*

Synopsis	Sponge MAC used to reply to unauthorized requests
Context	configure <i>service vpls service-name proxy-arp restrict-non-configured-ip-address</i> sponge-mac <i>mac-unicast-address-no-zero</i>
Tree	sponge-mac
Description	<p>This command configures the system to ignore ARP requests or neighbor solicitations from an unauthorized IP address. These requests are not learned in the proxy ARP or ND table (when the restrict-non-configured-ip-address command is configured), and the system replies with the configured sponge MAC address. Any IP address that is not configured as proxy ARP, ND dynamic ARP, or neighbor IP address is considered unauthorized and there is no reply.</p> <p>The configured sponge MAC address is not installed in the FDB or advertised in EVPN. If needed, the sponge MAC address can be configured as a static MAC in the same service in the node or a remote node.</p> <p>This command supersedes the operation of the restrict-non-configured-ip-address command for replies to ARP requests or neighbor solicitation:</p> <ul style="list-style-type: none"> • If only restrict-non-configured-ip-address is configured, all ARP or ND packets from unauthorized IPs are dropped. • If restrict-non-configured-ip-address sponge-mac is configured, ARP or ND packets from unauthorized IPs are dropped except for ARP requests or neighbor solicitation messages, to which the system replies with the configured sponge MAC address.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-refresh (*number* | *keyword*)

Synopsis	Time at which to send a refresh message
Context	configure <i>service vpls service-name proxy-arp send-refresh</i> (<i>number</i> <i>keyword</i>)
Tree	send-refresh
Range	120 to 86400
Options	never
Default	never
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-arp

Synopsis	Enter the static-arp context
Context	configure service vpls <i>service-name</i> proxy-arp static-arp
Tree	static-arp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address [[ipv4-address](#)] *ipv4-unicast-address*

Synopsis	Enter the ip-address list instance
Context	configure service vpls <i>service-name</i> proxy-arp static-arp ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-address] *ipv4-unicast-address*

Synopsis	Proxy ARP IPv4 address
Context	configure service vpls <i>service-name</i> proxy-arp static-arp ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address-no-zero*

Synopsis	Proxy ARP MAC address for static entry
Context	configure service vpls <i>service-name</i> proxy-arp static-arp ip-address <i>ipv4-unicast-address</i> mac <i>mac-unicast-address-no-zero</i>
Tree	mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

table-size *number*

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	configure service vpls <i>service-name</i> proxy-arp table-size <i>number</i>
Tree	table-size
Range	1 to 16383
Default	250
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-nd

Synopsis	Enable the proxy-nd context
Context	configure service vpls <i>service-name</i> proxy-nd
Tree	proxy-nd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the proxy
Context	configure service vpls <i>service-name</i> proxy-nd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

age-time (*number* | *keyword*)

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
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Context	configure service vpls service-name proxy-nd age-time (<i>number</i> <i>keyword</i>)
Tree	age-time
Range	60 to 86400
Units	seconds
Options	never
Default	never
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-detect

Synopsis	Enter the duplicate-detect context
Context	configure service vpls service-name proxy-nd duplicate-detect
Tree	duplicate-detect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

anti-spoof-mac *mac-unicast-address-no-zero*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	configure service vpls service-name proxy-nd duplicate-detect anti-spoof-mac <i>mac-unicast-address-no-zero</i>
Tree	anti-spoof-mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down-time (*number* | *keyword*)

Synopsis	Hold down time for a duplicate entry
Context	configure service vpls service-name proxy-nd duplicate-detect hold-down-time (<i>number</i> <i>keyword</i>)

Tree	hold-down-time
Range	2 to 60
Units	minutes
Options	max
Default	9
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

num-moves *number*

Synopsis	Number of moves required to declare a duplicate entry
Context	configure service vpls <i>service-name</i> proxy-nd duplicate-detect num-moves <i>number</i>
Tree	num-moves
Range	3 to 10
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-blackhole *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	configure service vpls <i>service-name</i> proxy-nd duplicate-detect static-blackhole <i>boolean</i>
Tree	static-blackhole
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

window *number*

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
Context	configure service vpls <i>service-name</i> proxy-nd duplicate-detect window <i>number</i>

Tree	window
Range	1 to 15
Units	minutes
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-neighbor

Synopsis	Enter the dynamic-neighbor context
Context	configure service vpls <i>service-name</i> proxy-nd dynamic-neighbor
Tree	dynamic-neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address [[ipv6-address](#)] *ipv6-address*

Synopsis	Enter the ip-address list instance
Context	configure service vpls <i>service-name</i> proxy-nd dynamic-neighbor ip-address <i>ipv6-address</i>
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis	Proxy ND IPv6 address
Context	configure service vpls <i>service-name</i> proxy-nd dynamic-neighbor ip-address <i>ipv6-address</i>
Tree	ip-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-list *reference*

Synopsis	MAC list for the dynamic entry
Context	configure service vpls <i>service-name</i> proxy-nd dynamic-neighbor ip-address ipv6-address mac-list <i>reference</i>
Tree	mac-list
Reference	configure service proxy-arp-nd mac-list list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolve-retry-time *number*

Synopsis	Frequency at which the resolve messages are sent
Context	configure service vpls <i>service-name</i> proxy-nd dynamic-neighbor ip-address ipv6-address resolve-retry-time <i>number</i>
Tree	resolve-retry-time
Range	1 to 60
Units	minutes
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *reference*

Synopsis	Add a list entry for sap
Context	configure service vpls <i>service-name</i> proxy-nd dynamic-neighbor ip-address ipv6-address sap <i>reference</i>
Tree	sap
Description	Commands in this context configure the proxy ARP or ND entry for creation when the ARP or neighbor advertisement (NA) packet for the configured IP address is received on the configured SAP, when configured under the dynamic-arp ip-address context. This command can be configured in combination with the mac-list for the entry, in which case, the MAC of the ARP or NA message and the SAP on which the ARP or NA packet is received are both checked before creating the entry.
Max. instances	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[sap-id] *reference*

Synopsis SAP identifier

Context **configure** [service vpls](#) *service-name* [proxy-nd dynamic-neighbor ip-address](#) [ipv6-address](#) [sap](#) *reference*

Tree [sap](#)

Reference **configure** [service vpls](#) *service-name* [sap](#) *sap*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dynamic-populate *boolean*

Synopsis Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings

Context **configure** [service vpls](#) *service-name* [proxy-nd dynamic-populate](#) *boolean*

Tree [dynamic-populate](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

evpn

Synopsis Enter the **evpn** context

Context **configure** [service vpls](#) *service-name* [proxy-nd evpn](#)

Tree [evpn](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

advertise-neighbor-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertisement type of static or dynamic entries in EVPN
Context	configure service vpls service-name proxy-nd evpn advertise-neighbor-type keyword
Tree	advertise-neighbor-type
Description	<p>This command enables the advertisement of static or dynamic entries that are learned as host, router, or host and router (only one option is possible in a specified service). It also determines the R flag (host or router) when sending Neighbor Advertisement (NA) messages for existing EVPN entries in the proxy-ND table.</p> <p>The router-host command option is only possible when the ARP/ND extended community is advertised along with the MAC/IP routes. It determines that both host and router (dynamic and static) entries are advertised in MAC/IP routes, with an indication whether the entry is host or router in the R flag. These EVPN entries are installed as host or router entries depending on the R flag of the route, and NA messages for them are sent with the proper host or router indication.</p>
Options	router, host, router-host
Default	router
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flood

Synopsis	Enter the flood context
Context	configure service vpls service-name proxy-nd evpn flood
Tree	flood
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-neighbor-advertise-host *boolean*

Synopsis	Flood host unsolicited Neighbor Advertisement (NA) replies to EVPN
Context	configure service vpls service-name proxy-nd evpn flood unknown-neighbor-advertise-host boolean
Tree	unknown-neighbor-advertise-host

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-neighbor-advertise-router *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Flood router unsolicited Neighbor Advertisement (NA) replies to EVPN
Context	configure service vpls <i>service-name</i> proxy-nd evpn flood unknown-neighbor-advertise-router <i>boolean</i>
Tree	unknown-neighbor-advertise-router
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unknown-neighbor-solicitation *boolean*

Synopsis	Flood unsolicited Neighbor Solicitation messages (with source squelching) into EVPN network
Context	configure service vpls <i>service-name</i> proxy-nd evpn flood unknown-neighbor-solicitation <i>boolean</i>
Tree	unknown-neighbor-solicitation
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	configure service vpls <i>service-name</i> proxy-nd evpn route-tag <i>number</i>

Tree	route-tag
Range	0 1 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-local-es

Synopsis	Enter the evpn-local-es context
Context	configure service vpls <i>service-name</i> proxy-nd evpn-local-es
Tree	evpn-local-es
Description	Commands in this context configure EVPN local ESI information used by proxy-ARD and proxy-ND entries.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

advertise *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise EVPN local ES entries
Context	configure service vpls <i>service-name</i> proxy-nd evpn-local-es advertise <i>boolean</i>
Tree	advertise
Description	When configured to true , the router advertises EVPN local ES entries as MAC/IP advertisement routes with the proxy bit set.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Retention timer for EVPN local ES entries
Context	configure service vpls <i>service-name</i> proxy-nd evpn-local-es retention-timer <i>number</i>
Tree	retention-timer

Description	This command sets the retention timer for EVPN local ES entries, defining how long a proxy-ARP or proxy-ND entry is kept after the originating EVPN MAC/IP route is withdrawn.
Range	0 30 to 65535
Units	seconds
Default	0
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

flood

Synopsis	Enter the flood context
Context	configure service vpls <i>service-name</i> proxy-nd flood
Tree	flood
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

received-unknown-neighbor-advertise-host *boolean*

Synopsis	Allow unknown NA host messages to flood the service
Context	configure service vpls <i>service-name</i> proxy-nd flood received-unknown-neighbor-advertise-host <i>boolean</i>
Tree	received-unknown-neighbor-advertise-host
Description	<p>When configured to true, the system floods received unsolicited NAs into the VPLS service (to EVPN destinations and SAPs or SDP-binds).</p> <p>When configured to false, the system does not flood unsolicited NAs regardless of the configure service vpls proxy-nd evpn flood unknown-neighbor-advertise-host command configuration.</p> <p>The NA messages impacted by this command are NA messages with the following flags: S=0 and R=0.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

received-unknown-neighbor-advertise-router *boolean*

Synopsis	Allow unknown router NA host messages to flood service
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Context	configure service vpls service-name proxy-nd flood received-unknown-neighbor-advertise-router boolean
Tree	received-unknown-neighbor-advertise-router
Description	<p>When configured to true, the system floods received unsolicited router NAs into the VPLS service (to EVPN destinations and SAPs or SDP-binds).</p> <p>When configured to false, the system does not flood unsolicited router NAs regardless of the configure service vpls proxy-nd evpn flood unknown-neighbor-advertise-router command configuration.</p> <p>The NA messages impacted by this command are NA messages with the following flags: S=0 and R=1.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

received-unknown-neighbor-solicitation boolean

Synopsis	Allow unknown NS messages to flood the service
Context	configure service vpls service-name proxy-nd flood received-unknown-neighbor-solicitation boolean
Tree	received-unknown-neighbor-solicitation
Description	<p>When configured to true, the system floods unknown NS messages into the VPLS service (to EVPN destinations and SAPs or SDP-binds).</p> <p>When configured to false, the system does not flood unknown NS messages regardless of the configure service vpls proxy-nd evpn flood unknown-neighbor-solicitation command configuration.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

process-dad-neighbor-solicitations boolean

Synopsis	Enable replies to DAD neighbor solicitations
Context	configure service vpls service-name proxy-nd process-dad-neighbor-solicitations boolean
Tree	process-dad-neighbor-solicitations
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

restrict-non-configured-ip-address



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the restrict-non-configured-ip-address context
Context	configure service vpls service-name proxy-nd restrict-non-configured-ip-address
Tree	restrict-non-configured-ip-address
Description	Commands in this context configure whether all the configured dynamic IP address entries are considered the only authorized entries in the proxy ARP or ND table. ARP or ND packets coming from a unauthorized sender IP are dropped. Therefore, unauthorized IP addresses are not learned in the proxy ARP or ND table, and ARP requests or neighbor solicitations (NS) coming from a unauthorized sender IP are not replied (unless the sponge-mac command option is configured).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sponge-mac mac-unicast-address-no-zero

Synopsis	Sponge MAC used to reply to unauthorized requests
Context	configure service vpls service-name proxy-nd restrict-non-configured-ip-address sponge-mac mac-unicast-address-no-zero
Tree	sponge-mac
Description	<p>This command configures the system to ignore ARP requests or neighbor solicitations from an unauthorized IP address. These requests are not learned in the proxy ARP or ND table (when the restrict-non-configured-ip-address command is configured), and the system replies with the configured sponge MAC address. Any IP address that is not configured as proxy ARP, ND dynamic ARP, or neighbor IP address is considered unauthorized and there is no reply.</p> <p>The configured sponge MAC address is not installed in the FDB or advertised in EVPN. If needed, the sponge MAC address can be configured as a static MAC in the same service in the node or a remote node.</p> <p>This command supersedes the operation of the restrict-non-configured-ip-address command for replies to ARP requests or neighbor solicitation:</p> <ul style="list-style-type: none"> • If only restrict-non-configured-ip-address is configured, all ARP or ND packets from unauthorized IPs are dropped. • If restrict-non-configured-ip-address sponge-mac is configured, ARP or ND packets from unauthorized IPs are dropped except for ARP requests or neighbor

solicitation messages, to which the system replies with the configured sponge MAC address.

String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-refresh (*number* | *keyword*)

Synopsis	Time at which to send a refresh message
Context	configure service vpls <i>service-name</i> proxy-nd send-refresh (<i>number</i> <i>keyword</i>)
Tree	send-refresh
Range	120 to 86400
Options	never
Default	never
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor

Synopsis	Enter the static-neighbor context
Context	configure service vpls <i>service-name</i> proxy-nd static-neighbor
Tree	static-neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address [[ipv6-address](#)] *ipv6-address*

Synopsis	Enter the ip-address list instance
Context	configure service vpls <i>service-name</i> proxy-nd static-neighbor ip-address <i>ipv6-address</i>
Tree	ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis	Proxy ND IPv6 address
Context	configure <i>service vpls service-name proxy-nd static-neighbor ip-address ipv6-address</i>
Tree	<i>ip-address</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address-no-zero*

Synopsis	Proxy ARP MAC address for static entry
Context	configure <i>service vpls service-name proxy-nd static-neighbor ip-address ipv6-address mac mac-unicast-address-no-zero</i>
Tree	<i>mac</i>
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Entry type
Context	configure <i>service vpls service-name proxy-nd static-neighbor ip-address ipv6-address type keyword</i>
Tree	<i>type</i>
Options	host, router
Default	router
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

table-size *number*

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	configure <i>service vpls service-name proxy-nd table-size number</i>

Tree	table-size
Range	1 to 16383
Default	250
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

routed-vpls

Synopsis	Enable the routed-vpls context
Context	configure service vpls <i>service-name</i> routed-vpls
Tree	routed-vpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast

Synopsis	Enter the multicast context
Context	configure service vpls <i>service-name</i> routed-vpls multicast
Tree	multicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vpls <i>service-name</i> routed-vpls multicast ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vpls <i>service-name</i> routed-vpls multicast ipv6
Tree	ipv6

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls service-name routed-vpls multicast ipv6 mld-snooping
Tree	mld-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrouter-port *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	configure service vpls service-name routed-vpls multicast ipv6 mld-snooping mrouter-port boolean
Tree	mrouter-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	configure service vpls service-name sap sap
Tree	sap
Description	<p>Commands in this context configure a SAP within a service. A SAP is a combination of port and encapsulation parameters, which identifies the service access point on the interface and within the platform. Each SAP must be unique. All SAPs must be explicitly created within a service or on an IP interface.</p> <p>The SAP is owned by the service in which it was created. A SAP can only be associated with a single service. A SAP can only be defined on a port that has been configured as an access port.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] sap

Synopsis	SAP identifier
Context	configure service vpls <i>service-name</i> sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service vpls <i>service-name</i> sap <i>sap</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service vpls <i>service-name</i> sap <i>sap</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arp-reply-agent *keyword*

Synopsis	Enable arp-reply-agent function
Context	configure service vpls <i>service-name</i> sap <i>sap</i> arp-reply-agent <i>keyword</i>
Tree	arp-reply-agent
Options	true, with-subscr-ident

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service vpls <i>service-name</i> sap <i>sap</i> bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-vpls-mh-veid *number*

Synopsis	BGP-VPLS multi-homing VE-ID
Context	configure service vpls <i>service-name</i> sap <i>sap</i> bgp-vpls-mh-veid <i>number</i>
Tree	bgp-vpls-mh-veid
Description	<p>This command specifies a VE ID that is configured on SAPs that are part of an EVPN single-active Ethernet Segment. The configuration of this command allows the advertisement of L2VPN routes that indicate the state of multi-homed SAPs to the remote BGP-VPLS PEs, which can trigger a MAC flush operation on the service to avoid traffic from being blackholed when a failure occurs in the active PE.</p> <p>When unconfigured from the SAP, L2VPN routes are withdrawn, which causes MAC flush processing on the remote BGP-VPLS.</p>
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bpdu-translation *keyword*

Synopsis	Bpdu translation on this SAP
Context	configure service vpls <i>service-name</i> sap <i>sap</i> bpdu-translation <i>keyword</i>
Tree	bpdu-translation
Options	auto, pvst, stp, pvst-rw, auto-rw
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

collect-stats *boolean*

Synopsis Collect accounting statistics

Context **configure** [service vpls](#) *service-name* [sap](#) *sap* **collect-stats** *boolean*

Tree [collect-stats](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *long-description*

Synopsis Text description

Context **configure** [service vpls](#) *service-name* [sap](#) *sap* **description** *long-description*

Tree [description](#)

String length 1 to 160

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dhcp

Synopsis Enter the **dhcp** context

Context **configure** [service vpls](#) *service-name* [sap](#) *sap* **dhcp**

Tree [dhcp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of DHCP

Context **configure** [service vpls](#) *service-name* [sap](#) *sap* **dhcp** **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** *service vpls service-name sap sap dhcp description description*
Tree *description*
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

lease-populate

Synopsis Enter the **lease-populate** context
Context **configure** *service vpls service-name sap sap dhcp lease-populate*
Tree *lease-populate*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

max-leases *number*

Synopsis Maximum number of DHCPv4 leases
Context **configure** *service vpls service-name sap sap dhcp lease-populate max-leases number*
Tree *max-leases*
Range 0 to 131071
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

option-82

Synopsis Enter the **option-82** context
Context **configure** *service vpls service-name sap sap dhcp option-82*
Tree *option-82*

Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure service vpls <i>service-name</i> sap sap dhcp option-82 action <i>keyword</i>
Tree	action
Options	replace, drop, keep
Default	keep
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service vpls <i>service-name</i> sap sap dhcp option-82 circuit-id
Tree	circuit-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service vpls <i>service-name</i> sap sap dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	User-defined hexadecimal value of the option
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Context	configure service vpls service-name sap sap dhcp option-82 circuit-id hex-string hex-string
Tree	hex-string
String length	1 to 66
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the circuit ID
Context	configure service vpls service-name sap sap dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure service vpls service-name sap sap dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	<p>When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.</p> <p>When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.</p>
Notes	The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-id

Synopsis	Enter the remote-id context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 remote-id ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: ascii-string , hex-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	Option as a hexadecimal string
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 remote-id hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 66
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string , hex-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Use the MAC address for the remote ID
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , hex-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the remote ID
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 remote-id none
Tree	none
Notes	The following elements are part of a choice: ascii-string , hex-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

sap-id *boolean*

Synopsis Send SAP ID in the sub-option of the DHCP relay packet
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [dhcp option-82 vendor-specific-option](#) [sap-id](#) *boolean*
Tree [sap-id](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

service-id *boolean*

Synopsis Send the service ID in the Vendor Specific Option
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [dhcp option-82 vendor-specific-option](#) [service-id](#) *boolean*
Tree [service-id](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

string *string-not-all-spaces*

Synopsis User-defined ASCII string for the VSO
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [dhcp option-82 vendor-specific-option](#) [string](#) *string-not-all-spaces*
Tree [string](#)
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure <i>service vpls</i> <i>service-name sap sap</i> <i>dhcp option-82 vendor-specific-option system-id boolean</i>
Tree	<i>system-id</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-server

Synopsis	Enter the proxy-server context
Context	configure <i>service vpls</i> <i>service-name sap sap</i> <i>dhcp proxy-server</i>
Tree	<i>proxy-server</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure <i>service vpls</i> <i>service-name sap sap</i> <i>dhcp proxy-server admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

emulated-server *ipv4-unicast-address*

Synopsis	IP address used as DHCP server address in SAP context
Context	configure <i>service vpls</i> <i>service-name sap sap</i> <i>dhcp proxy-server emulated-server ipv4-unicast-address</i>
Tree	<i>emulated-server</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-time

Synopsis	Enter the lease-time context
Context	configure service vpls service-name sap sap dhcp proxy-server lease-time
Tree	lease-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	configure service vpls service-name sap sap dhcp proxy-server lease-time radius-override <i>boolean</i>
Tree	radius-override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	DHCP lease time
Context	configure service vpls service-name sap sap dhcp proxy-server lease-time value <i>number</i>
Tree	value
Range	300 to 315446399
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snoop *boolean*

Synopsis	Enable DHCP snooping on the SAP
Context	configure service vpls service-name sap sap dhcp snoop <i>boolean</i>

Tree	snoop
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vpls <i>service-name</i> sap sap dhcp6
Tree	dhcp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> sap sap dhcp6 description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldra

Synopsis	Enable the ldra context
Context	configure service vpls <i>service-name</i> sap sap dhcp6 ldra
Tree	ldra
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-type *keyword*

Synopsis	LDRA interface type
Context	configure service vpls <i>service-name</i> sap sap dhcp6 ldra interface-type <i>keyword</i>

Tree	interface-type
Description	<p>This command specifies the LDRA interface type.</p> <p>client-facing - configure the SAP as an untrusted client-facing interface. Only DHCPv6 client messages are accepted and encapsulated in a Relay-Forward message. It is mandatory to configure an interface ID for client-facing SAPs. Relay-Forward, Relay-Reply, and DHCPv6 server messages are silently dropped when received on a client-facing SAP.</p> <p>network-facing - configure the SAP as a network-facing interface. Only Relay-Reply messages are accepted: the server message is extracted from the Relay-Reply message and forwarded in the VPLS. All other DHCPv6 message types are silently dropped when received on a network-facing SAP.</p>
Options	client-facing, network-facing
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure service vpls service-name sap sap dhcp6 ldra options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-id

Synopsis	Enable the interface-id context
Context	configure service vpls service-name sap sap dhcp6 ldra options interface-id
Tree	interface-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use an ASCII-encoded concatenated tuple
Context	configure service vpls service-name sap sap dhcp6 ldra options interface-id ascii-tuple
Tree	ascii-tuple

Description	This command specifies the use of the ASCII-encoded concatenated tuple, which consists of the system name, service ID, and SAP ID separated by " ".
Notes	The following elements are part of a mandatory choice: ascii-tuple or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-ascii-tuple

Synopsis	Use an enhanced ASCII-encoded concatenated tuple
Context	configure service vpls service-name sap sap dhcp6 ldra options interface-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	This command specifies the use of the ASCII-encoded concatenated tuple enhanced with VLAN ID and dot1p bits, consisting of the system name, service ID, SAP ID, dot1p inner VLAN, and inner VLAN ID separated by " ".
Notes	The following elements are part of a mandatory choice: ascii-tuple or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-id

Synopsis	Enter the remote-id context
Context	configure service vpls service-name sap sap dhcp6 ldra options remote-id
Tree	remote-id
Description	Commands in this context configure the Relay-Agent remote ID contents inserted by the LDRA.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Use the DHCPv6 client source MAC address
Context	configure service vpls service-name sap sap dhcp6 ldra options remote-id mac
Tree	mac
Description	This command sets the enterprise number field of the Relay Agent remote ID to 6527 and configures the DHCPv6 client source MAC address as six hexadecimal numbers.

Notes	The following elements are part of a choice: mac or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	User-defined ASCII string
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dhcp6 ldra options remote-id string <i>string</i>
Tree	string
Description	This command sets the enterprise number field of the Relay-Agent remote ID to 6527 and configures the ASCII-encoded string.
String length	1 to 32
Notes	The following elements are part of a choice: mac or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service vpls <i>service-name</i> sap <i>sap</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-mac-rewrite *mac-unicast-address-no-zero*

Synopsis	Destination MAC overwrite for unicast
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress dest-mac-rewrite <i>mac-unicast-address-no-zero</i>
Tree	dest-mac-rewrite

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

filter

Synopsis Enter the **filter** context
Context **configure** *service vpls service-name* *sap sap egress filter*
Tree *filter*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ip reference

Synopsis IPv4 filter policy name
Context **configure** *service vpls service-name* *sap sap egress filter ip reference*
Tree *ip*
Reference **configure** *filter ip-filter filter-name*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** *service vpls service-name* *sap sap egress filter ipv6 reference*
Tree *ipv6*
Reference **configure** *filter ipv6-filter filter-name*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

qos

Synopsis Enter the **qos** context
Context **configure** *service vpls service-name* *sap sap egress qos*
Tree *qos*

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

policer-control-policy

Synopsis Enter the **policer-control-policy** context
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [egress qos](#) [policer-control-policy](#)
Tree [policer-control-policy](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overrides

Synopsis Enable the **overrides** context
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [egress qos](#) [policer-control-policy](#) [overrides](#)
Tree [overrides](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

root

Synopsis Enter the **root** context
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [egress qos](#) [policer-control-policy](#) [overrides](#) [root](#)
Tree [root](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [egress qos](#) [policer-control-policy](#) [overrides](#) [root](#) [max-rate](#) (*number* | *keyword*)
Tree [max-rate](#)
Range 1 to 6400000000
Options max

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context
Context **configure** [service vpls service-name sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds](#)
Tree [priority-mbs-thresholds](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space
Context **configure** [service vpls service-name sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation](#) (*number* | *keyword*)
Tree [min-thresh-separation](#)
Range 0 to 16777216
Units bytes
Options auto
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance
Context **configure** [service vpls service-name sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority](#) *number*
Tree [priority](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[[priority-level](#)] *number*

Synopsis Priority level

Context	configure service vpls service-name sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority number
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service vpls service-name sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority number mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service vpls service-name sap sap egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service vpls service-name sap sap egress qos sap-egress
Tree	sap-egress
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

overrides

Synopsis Enter the **overrides** context

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress overrides](#)

Tree [overrides](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress overrides](#) [policer reference](#)

Tree [policer](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[\[policer-id\]](#) *reference*

Synopsis Policer unique ID

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress overrides](#) [policer reference](#)

Tree [policer](#)

Reference **configure** [qos sap-egress](#) *qos-policy-name* [policer](#) *number*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress overrides](#) [policer reference](#) [cbs](#) (*number* | *keyword*)

Tree [cbs](#)

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides policer reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides policer reference packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides policer reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

cir *decimal-number*

Synopsis CIR percent rate

Context **configure** *service vpls service-name sap sap egress qos sap-egress overrides policer*
reference percent-rate cir decimal-number

Tree *cir*

Range 0.00 to 100.00

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir *decimal-number*

Synopsis PIR percent rate

Context **configure** *service vpls service-name sap sap egress qos sap-egress overrides policer*
reference percent-rate pir decimal-number

Tree *pir*

Range 0.01 to 100.00

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

rate

Synopsis Enter the **rate** context

Context **configure** *service vpls service-name sap sap egress qos sap-egress overrides policer*
reference rate

Tree *rate*

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis CIR rate

Context	configure service vpls service-name sap sap egress qos sap-egress overrides policer <i>reference rate cir (number keyword)</i>
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number | keyword*)

Synopsis	PIR rate
Context	configure service vpls service-name sap sap egress qos sap-egress overrides policer <i>reference rate pir (number keyword)</i>
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vpls service-name sap sap egress qos sap-egress overrides policer <i>reference stat-mode keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
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Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] reference

Synopsis	Policer unique ID
Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference
Tree	queue
Reference	configure qos sap-egress qos-policy-name queue number
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-frame-overhead decimal-number

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number
Tree	avg-frame-overhead
Description	This command configures overrides for the average frame overhead. The overrides supersede the average frame overhead configuration under the queue. For a full description of this command, see the configure qos network-queue queue avg-frame-overhead and configure qos sap-egress queue avg-frame-overhead contexts.
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (number | keyword)

Synopsis	CBS
Context	configure service vpls service-name sap sap egress qos sap-egress overrides queue reference cbs (number keyword)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624

Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir decimal-number

Synopsis	CIR percent rate
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir decimal-number

Synopsis	PIR percent rate
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpls <i>service-name</i> sap sap egress qos sap-egress overrides queue reference rate
Tree	rate

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos sap-egress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-name *reference*

Synopsis Name of the queue group redirect list policy

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress](#) [port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos queue-group-templates](#) [egress queue-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

instance *number*

Synopsis Instance of port queue group

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos sap-egress](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

scheduler-policy

Synopsis Enter the **scheduler-policy** context

Context **configure** [service vpls](#) *service-name* [sap sap](#) [egress qos](#) [scheduler-policy](#)

Tree [scheduler-policy](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

overrides

Synopsis Enter the **overrides** context

Context **configure** **service vpls** *service-name* **sap sap** **egress qos scheduler-policy overrides**

Tree **overrides**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

scheduler [**scheduler-name**] *named-item*

Synopsis Enter the **scheduler** list instance

Context **configure** **service vpls** *service-name* **sap sap** **egress qos scheduler-policy overrides**
scheduler *named-item*

Tree **scheduler**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis Scheduler name

Context **configure** **service vpls** *service-name* **sap sap** **egress qos scheduler-policy overrides**
scheduler *named-item*

Tree **scheduler**

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String length 1 to 32

String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vpls <i>service-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
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Context	configure service vpls service-name sap sap egress qos scheduler-policy policy-name reference
Tree	policy-name
Reference	configure qos scheduler-policy named-item
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure service vpls service-name sap sap eth-cfm
Tree	eth-cfm
Description	Commands in this context configure ETH-CFM command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep md-admin-name reference ma-admin-name reference mep-id number

Synopsis	Enter the mep list instance
Context	configure service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance. A MEP created at the VPLS service level, using the configure service vpls eth-cfm command, creates a virtual MEP.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name reference

Synopsis	Maintenance Domain (MD) name
Context	configure service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	configure eth-cfm domain admin-name
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ma-admin-name *reference*

Synopsis Maintenance Association (MA) name
Context **configure** [service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number](#)
Tree [mep](#)
Reference **configure** [eth-cfm domain admin-name association admin-name](#)
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mep-id *number*

Synopsis Maintenance Endpoint (MEP) ID
Context **configure** [service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number](#)
Tree [mep](#)
Range 1 to 8191
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the MEP
Context **configure** [service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword](#)
Tree [admin-state](#)
Options enable, disable
Default disable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ais

Synopsis	Enable the ais context
Context	configure service vpls <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais
Tree	ais
Description	Commands in this context enable the reception of AIS messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service vpls <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i>
Tree	client-meg-level
Description	This command configures the client Maintenance Entity Group (MEG) level to use for AIS message generation. One restriction is that the client MEG level must be higher than the local MEG level. Only the lowest client MEG level is used for facility MEPs.
Range	1 to 7
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service vpls <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>
Tree	interface-support
Description	<p>When configured to true, the system enables the generation of AIS PDUs based on the associated endpoint state.</p> <p>AIS on Down MEPs triggers and clears based on the operational status of the entity it is configured on. If CCM is configured to true, transmission of the AIS PDU is based on either the nonoperational state of the entity or on any CCM defect conditions. AIS generation ceases if both the operational state is up and CCM has no defect conditions. If the MEP is not enabled with CCM, the operational state of the entity is the only consideration, assuming the command is present for the MEP.</p>

	When configured to false , the generation of AIS PDUs is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval number

Synopsis	Transmission interval for AIS messages
Context	configure service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect keyword

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect keyword
Tree	low-priority-defect
Options	all-def – Generate AIS frame for any defect in CCM state machine mac-rem-err-xcon – Generate AIS frame for def-mac-status defect or higher
Default	all-def
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Priority of the AIS messages generated by the node
Context	configure service vpls service-name sap sap eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number
Tree	priority
Range	0 to 7

Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ccm *boolean*

Synopsis Generate CCM messages
Context **configure** **service** **vpls** *service-name* **sap** **sap** **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **ccm** *boolean*
Tree **ccm**
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ccm-ltm-priority *number*

Synopsis Priority of CCM and LTM messages transmitted by the MEP
Context **configure** **service** **vpls** *service-name* **sap** **sap** **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **ccm-ltm-priority** *number*
Tree **ccm-ltm-priority**
Range 0 to 7
Default 7
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** **service** **vpls** *service-name* **sap** **sap** **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **description** *description*
Tree **description**
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

direction *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure service vpls <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which the MEP faces on the bridge port.
Options	down – Send ETH-CFM messages toward the MAC relay entity up – Send ETH-CFM messages away from the MAC relay entity
Default	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>service-name</i> sap sap eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fault-propagation *keyword*

Synopsis Fault propagation for the MEP

Context **configure** [service vpls](#) [service-name](#) [sap](#) [sap](#) [eth-cfm mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) **fault-propagation** *keyword*

Tree [fault-propagation](#)

Options use-if-status-tlv – Use the interface TLV
suspend-ccm – Suspend continuity check messages

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service vpls](#) [service-name](#) [sap](#) [sap](#) [eth-cfm mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Default mac-rem-err-xcon

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis MAC address of the MEP

Context **configure** [service vpls](#) [service-name](#) [sap](#) [sap](#) [eth-cfm mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) **mac-address** *mac-unicast-address-no-zero*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

String format 'ieeee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vpls <i>service-name</i> sap <i>sap</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fdb

Synopsis	Enter the fdb context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> fdb
Tree	fdb
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	configure service vpls <i>service-name</i> sap <i>sap</i> fdb auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list
Context	configure service vpls <i>service-name</i> sap <i>sap</i> fdb auto-learn-mac-protect-exclude-list <i>reference</i>
Tree	auto-learn-mac-protect-exclude-list

Description	<p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
Reference	configure service mac-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-unknown-source *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	configure service vpls <i>service-name</i> sap <i>sap</i> fdb discard-unknown-source <i>boolean</i>
Tree	discard-unknown-source
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-unprotected-dest-mac *boolean*

Synopsis	Discard packet with unprotected destination MAC address
Context	configure service vpls <i>service-name</i> sap <i>sap</i> fdb discard-unprotected-dest-mac <i>boolean</i>
Tree	discard-unprotected-dest-mac
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit-mac-move *keyword*

Synopsis	MAC move
Context	configure service vpls <i>service-name</i> sap <i>sap</i> fdb limit-mac-move <i>keyword</i>
Tree	limit-mac-move
Options	blockable, non-blockable
Default	blockable

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mac-learning

Synopsis Enter the **mac-learning** context
Context **configure** [service vpls service-name sap sap fdb mac-learning](#)
Tree [mac-learning](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

aging *boolean*

Synopsis Enable aging of MAC addresses
Context **configure** [service vpls service-name sap sap fdb mac-learning aging boolean](#)
Tree [aging](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

learning *boolean*

Synopsis Enable learning of new MAC addresses
Context **configure** [service vpls service-name sap sap fdb mac-learning learning boolean](#)
Tree [learning](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mac-pinning *boolean*

Synopsis Enable MAC address pinning on this SAP
Context **configure** [service vpls service-name sap sap fdb mac-pinning boolean](#)
Tree [mac-pinning](#)
Default false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	configure service vpls service-name sap sap fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this SAP.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> <p>When the configured limit is reached and the configure service pw-template fdb discard-unknown-source command is set to true for this SAP, packets with unknown source MAC addresses are discarded. If discard-unknown-source is set to false, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p> <p>However, if the configure service vpls fdb discard-unknown command is set to true, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.</p> <p>When unconfigured, the SAP uses the global MAC learning limitations.</p>
Range	1 to 511999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Action taken after a relearn request for protected MAC
Context	configure service vpls service-name sap sap fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Description	This command configures how the system handles relearn requests for protected MAC addresses.
Options	sap-oper-down, alarm-only, discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

i-vpls-mac-flush

Synopsis	Enter the i-vpls-mac-flush context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> i-vpls-mac-flush
Tree	i-vpls-mac-flush
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> i-vpls-mac-flush bgp-evpn
Tree	bgp-evpn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls <i>service-name</i> sap sap igmp-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>service-name</i> sap sap igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>service-name</i> sap sap igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping send-queries <i>boolean</i>

Tree	send-queries
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-address](#)] *ipv4-multicast-address*

Synopsis	Enter the group list instance
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping static group <i>ipv4-multicast-address</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[group-address](#)] *ipv4-multicast-address*

Synopsis	Group address of static IGMP multicast channel
Context	configure service vpls <i>service-name</i> sap <i>sap</i> igmp-snooping static group <i>ipv4-multicast-address</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

source [source-address] *ipv4-unicast-address*

Synopsis Add a list entry for **source**

Context **configure** *service vpls service-name sap sap igmp-snooping static group ipv4-multicast-address* **source** *ipv4-unicast-address*

Tree **source**

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis Source IP address of multicast channel sending data

Context **configure** *service vpls service-name sap sap igmp-snooping static group ipv4-multicast-address* **source** *ipv4-unicast-address*

Tree **source**

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

starg

Synopsis any source address (*,G)

Context **configure** *service vpls service-name sap sap igmp-snooping static group ipv4-multicast-address* **starg**

Tree **starg**

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

version keyword

Synopsis	IGMP protocol version
Context	configure service vpls <i>service-name</i> sap sap igmp-snooping version <i>keyword</i>
Tree	version
Options	1, 2, 3
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vpls <i>service-name</i> sap sap ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>service-name</i> sap sap ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpls <i>service-name</i> sap sap ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure service vpls <i>service-name</i> sap sap ingress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service vpls <i>service-name</i> sap sap ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service vpls <i>service-name</i> sap sap ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vpls <i>service-name</i> sap sap ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216

Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[priority-level] *number*

Synopsis	Priority level
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis Policer control policy name

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos](#) [policer-control-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [policer-control-policy](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

instance *number*

Synopsis Queue group instance

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress](#) [fp-redirect-group instance number](#)

Tree [instance](#)

Range 1 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

overrides

Synopsis Enter the **overrides** context

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress](#) [overrides](#)

Tree [overrides](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress](#) [overrides policer reference](#)

Tree [policer](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[policer-id] *reference*

Synopsis Policer unique ID

Context **configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress](#) [overrides policer reference](#)

Tree [policer](#)

Reference **configure** [qos sap-ingress](#) *qos-policy-name* [policer number](#)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Introduced	25.3.R2

Platforms7705 SAR Gen 2

percent-rate

SynopsisEnter the **percent-rate** context

Context**configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress overrides policer](#)
reference [percent-rate](#)

Tree[percent-rate](#)

NotesThe following elements are part of a choice: **percent-rate** or **rate**.

Introduced25.3.R2

Platforms7705 SAR Gen 2

cir decimal-number

SynopsisCIR percent rate

Context**configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress overrides policer](#)
reference [percent-rate](#) [cir decimal-number](#)

Tree[cir](#)

Range0.00 to 100.00

Introduced25.3.R2

Platforms7705 SAR Gen 2

pir decimal-number

SynopsisPIR percent rate

Context**configure** [service vpls](#) *service-name* [sap sap](#) [ingress qos sap-ingress overrides policer](#)
reference [percent-rate](#) [pir decimal-number](#)

Tree[pir](#)

Range0.01 to 100.00

Introduced25.3.R2

Platforms7705 SAR Gen 2

rate

SynopsisEnter the **rate** context

Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i>

Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [\[queue-id\]](#) *reference*

Synopsis	Enter the queue list instance
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference
Tree	queue
Reference	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service vpls service-name sap sap ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service vpls service-name sap sap ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (number | keyword)

Synopsis	CBS
Context	configure service vpls service-name sap sap ingress qos sap-ingress overrides queue reference cbs (number keyword)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
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Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

parent

Synopsis Enter the **parent** context

Context **configure** [service vpls service-name sap sap ingress qos sap-ingress overrides queue reference parent](#)

Tree [parent](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service vpls service-name sap sap ingress qos sap-ingress overrides queue reference parent cir-weight number](#)

Tree [cir-weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service vpls service-name sap sap ingress qos sap-ingress overrides queue reference parent weight number](#)

Tree [weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service vpls service-name sap sap ingress qos sap-ingress overrides queue reference percent-rate](#)

Tree [percent-rate](#)

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID
Context	configure service vpls <i>service-name</i> sap sap ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vpls <i>service-name</i> sap sap ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service vpls <i>service-name</i> sap sap ingress qos scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service vpls <i>service-name</i> sap sap ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis	Scheduler name
Context	configure service vpls <i>service-name</i> sap sap ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure <i>service vpls service-name sap sap ingress qos scheduler-policy overrides scheduler named-item parent</i>
Tree	<i>parent</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure <i>service vpls service-name sap sap ingress qos scheduler-policy overrides scheduler named-item parent cir-weight number</i>
Tree	<i>cir-weight</i>
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure <i>service vpls service-name sap sap ingress qos scheduler-policy overrides scheduler named-item parent weight number</i>
Tree	<i>weight</i>

Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vpls <i>service-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure service vpls <i>service-name</i> sap sap ingress qos scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qtag-manipulation

Synopsis	Enter the qtag-manipulation context
Context	configure service vpls <i>service-name</i> sap sap ingress qtag-manipulation
Tree	qtag-manipulation
Description	Commands in this context configure ingress VLAN translation.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

c-tag (*number* | *keyword*)

Synopsis	Inner C-tag value for ingress QinQ VLAN translation
Context	configure service vpls <i>service-name</i> sap sap ingress qtag-manipulation c-tag (<i>number</i> <i>keyword</i>)
Tree	c-tag
Range	0 to 4094
Options	tag-*
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

push-dot1q-vlan (*number* | *keyword*)

Synopsis	VLAN translation information
Context	configure service vpls <i>service-name</i> sap sap ingress qtag-manipulation push-dot1q-vlan (<i>number</i> <i>keyword</i>)

Tree	push-dot1q-vlan
Description	This command configures the router to overwrite the preserved VLAN ID with the configured value during VLAN translation. Configuring an explicit VLAN ID is supported only on dot1q encapsulated ports, and copying the outer VLAN ID to the inner position is supported only on QinQ encapsulated ports.
Range	0 to 4094
Options	use-sap-svlan – Copy the outer VLAN ID to inner position
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

s-tag *number*

Synopsis	Outer S-tag value for ingress QinQ VLAN translation
Context	configure service vpls <i>service-name</i> sap sap ingress qtag-manipulation s-tag <i>number</i>
Tree	s-tag
Range	0 to 4094
Notes	The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag).
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

l2pt

Synopsis	Enter the l2pt context
Context	configure service vpls <i>service-name</i> sap sap l2pt
Tree	l2pt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-boundary

Synopsis	Enable the force-boundary context
Context	configure service vpls <i>service-name</i> sap sap l2pt force-boundary
Tree	force-boundary
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

protocols

Synopsis Enter the **protocols** context

Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [l2pt](#) [force-boundary protocols](#)

Tree [protocols](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cdp boolean

Synopsis Enable Cisco discovery protocol

Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [l2pt](#) [force-boundary protocols](#) [cdp](#) *boolean*

Tree [cdp](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dtp boolean

Synopsis Enable dynamic trunking protocol

Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [l2pt](#) [force-boundary protocols](#) [dtp](#) *boolean*

Tree [dtp](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pagp boolean

Synopsis Enable port aggregation protocol

Context **configure** [service vpls](#) *service-name* [sap](#) [sap](#) [l2pt](#) [force-boundary protocols](#) [pagp](#) *boolean*

Tree [pagp](#)

Default false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

stp boolean

Synopsis Enable all spanning tree protocols
Context **configure** [service vpls service-name sap sap l2pt force-boundary protocols stp boolean](#)
Tree [stp](#)
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

udld boolean

Synopsis Enable unidirectional link detection
Context **configure** [service vpls service-name sap sap l2pt force-boundary protocols udld boolean](#)
Tree [udld](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

vtp boolean

Synopsis Enable virtual trunk protocol
Context **configure** [service vpls service-name sap sap l2pt force-boundary protocols vtp boolean](#)
Tree [vtp](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

termination

Synopsis Enable the **termination** context
Context **configure** [service vpls service-name sap sap l2pt termination](#)

Tree	termination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocols

Synopsis	Enter the protocols context
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols
Tree	protocols
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cdp *boolean*

Synopsis	Enable Cisco discovery protocol
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols cdp <i>boolean</i>
Tree	cdp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dtp *boolean*

Synopsis	Enable dynamic trunking protocol
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols dtp <i>boolean</i>
Tree	dtp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pagp *boolean*

Synopsis	Enable port aggregation protocol
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols pagp <i>boolean</i>
Tree	pagp

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp boolean

Synopsis	Enable all spanning tree protocols
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols stp <i>boolean</i>
Tree	stp
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udld boolean

Synopsis	Enable unidirectional link detection
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols udld <i>boolean</i>
Tree	udld
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vtp boolean

Synopsis	Enable virtual trunk protocol
Context	configure service vpls <i>service-name</i> sap sap l2pt termination protocols vtp <i>boolean</i>
Tree	vtp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Enter the lag context
Context	configure service vpls <i>service-name</i> sap sap lag

Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

managed-vlan-list

Synopsis	Enter the managed-vlan-list context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> managed-vlan-list
Tree	managed-vlan-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range [[vlan-range](#)] *string*

Synopsis	Add a list entry for range
Context	configure service vpls <i>service-name</i> sap <i>sap</i> managed-vlan-list range <i>string</i>
Tree	range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[vlan-range](#)] *string*

Synopsis	Range of VLANs associated with the M-VPLS SAP
Context	configure service vpls <i>service-name</i> sap <i>sap</i> managed-vlan-list range <i>string</i>
Tree	range
String format	'vlan-range' must be Q-tag range, default-sap, or .. range form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-ring

Synopsis	Enable the mc-ring context
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mc-ring
Tree	mc-ring

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ring-node *named-item*

Synopsis Name for the ring node associated with this SAP
Context **configure** [service vpls](#) *service-name* [sap](#) *sap* [mc-ring ring-node](#) *named-item*
Tree [ring-node](#)
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mld-snooping

Synopsis Enter the **mld-snooping** context
Context **configure** [service vpls](#) *service-name* [sap](#) *sap* [mld-snooping](#)
Tree [mld-snooping](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

fast-leave *boolean*

Synopsis Allow IGMP fast leave processing
Context **configure** [service vpls](#) *service-name* [sap](#) *sap* [mld-snooping fast-leave](#) *boolean*
Tree [fast-leave](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

import-policy *reference*

Synopsis Import policy that filters IGMP packets
Context **configure** [service vpls](#) *service-name* [sap](#) *sap* [mld-snooping import-policy](#) *reference*

Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls service-name sap sap mld-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls service-name sap sap mld-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls service-name sap sap mld-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>service-name</i> sap sap mld-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>service-name</i> sap sap mld-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vpls <i>service-name</i> sap sap mld-snooping static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-address](#)] *ipv6-multicast-address*

Synopsis	Enter the group list instance
Context	configure service vpls <i>service-name</i> sap sap mld-snooping static group <i>ipv6-multicast-address</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-address] *ipv6-multicast-address*

Synopsis	Group address of multicast channel
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping static group <i>ipv6-multicast-address</i>
Tree	group
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping static group <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[source-address](#)] *ipv6-unicast-address*

Synopsis	Source IP address
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping static group <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>service-name</i> sap <i>sap</i> mld-snooping static group <i>ipv6-multicast-address</i> starg
Tree	starg

Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	configure service vpls <i>service-name</i> sap sap mld-snooping version <i>keyword</i>
Tree	version
Options	1, 2
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Monitor operational group
Context	configure service vpls <i>service-name</i> sap sap monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service vpls <i>service-name</i> sap sap multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group
Context	configure service vpls <i>service-name</i> sap sap oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

process-cpm-traffic-on-sap-down *boolean*

Synopsis	Process CPM traffic on SAP down event
Context	configure service vpls <i>service-name</i> sap sap process-cpm-traffic-on-sap-down <i>boolean</i>
Tree	process-cpm-traffic-on-sap-down
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon-group *reference*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	configure service vpls <i>service-name</i> sap sap split-horizon-group <i>reference</i>
Tree	split-horizon-group
Reference	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp

Synopsis	Enter the stp context
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Context	configure service vpls service-name sap sap stp
Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of STP
Context	configure service vpls service-name sap sap stp admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	configure service vpls service-name sap sap stp auto-edge boolean
Tree	auto-edge
Description	<p>When configured to true, the router automatically detects the edge port characteristics of the SAP or spoke SDP. The STP concludes there is no bridge behind the spoke SDP, the OPER_EDGE variable is dynamically set to true. If a BPDU is received, the OPER_EDGE variable is dynamically set to false.</p> <p>When configured to false, the router disables automatic detection.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	configure service vpls service-name sap sap stp edge-port boolean
Tree	edge-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-type *keyword*

Synopsis	Configure STP link-type
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp link-type <i>keyword</i>
Tree	link-type
Options	pt-pt, shared
Default	pt-pt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-instance [**mst-inst-number**] *number*

Synopsis	Enter the mst-instance list instance
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp mst-instance <i>number</i>
Tree	mst-instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mst-inst-number] *number*

Synopsis	Multiple Spanning Tree Instance number
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp mst-instance <i>number</i>
Tree	mst-instance
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-path-cost *number*

Synopsis	MSTI path cost
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp mst-instance <i>number</i> mst-path-cost <i>number</i>
Tree	mst-path-cost
Range	1 to 200000000

Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-port-priority *number*

Synopsis	MSTI port priority
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp mst-instance <i>number</i> mst-port-priority <i>number</i>
Tree	mst-port-priority
Range	0 16 32 48 64 80 96 112 128 144 160 176 192 208 224 240
Default	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-cost *number*

Synopsis	Configure path-cost
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp path-cost <i>number</i>
Tree	path-cost
Range	1 to 2000000000
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-num *number*

Synopsis	Configure virtual port number
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp port-num <i>number</i>
Tree	port-num
Range	1 to 2047
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Configure STP priority
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp <i>priority</i> <i>number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	configure service vpls <i>service-name</i> sap <i>sap</i> stp root-guard <i>boolean</i>
Tree	<i>root-guard</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service vpls <i>service-name</i> service-id <i>number</i>
Tree	<i>service-id</i>
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-mtu *number*

Synopsis	MTU size
Context	configure service vpls <i>service-name</i> service-mtu <i>number</i>

Tree [service-mtu](#)

Description	<p>This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.</p> <p>The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.</p> <p>When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.</p> <p>If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.</p> <p>Binding operational states are automatically reevaluated.</p> <p>For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.</p> <p>Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.</p> <p>In the configure service epipe spoke-sdp context, the adv-service-mtu command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The adv-service-mtu command is also used to validate the value signaled by the far-end PE.</p>
Range	1 to 9782
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon-group [[shg-name](#)] *named-item*

Synopsis	Enter the split-horizon-group list instance
Context	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i>
Tree	split-horizon-group
Description	Commands in this context configure the split-horizon group options used in the VPLS instance.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[shg-name] *named-item*

Synopsis SHG name to which the SDP belongs
Context **configure** *service vpls service-name split-horizon-group named-item*
Tree *split-horizon-group*
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** *service vpls service-name split-horizon-group named-item description description*
Tree *description*
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

fdb

Synopsis Enter the **fdb** context
Context **configure** *service vpls service-name split-horizon-group named-item fdb*
Tree *fdb*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

saps

Synopsis	Enter the saps context
Context	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i> fdb saps
Tree	saps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with split horizon group
Context	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i> fdb saps auto-learn-mac-protect <i>boolean</i>
Tree	auto-learn-mac-protect
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-learn-mac-protect-exclude-list *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i> fdb saps auto-learn-mac-protect-exclude-list <i>reference</i>
Tree	auto-learn-mac-protect-exclude-list
Description	<p>This command references the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
Reference	configure service mac-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-unprotected-dest-mac *boolean*

Synopsis	Discard packet with unprotected destination MAC address
Context	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i> fdb saps discard-unprotected-dest-mac <i>boolean</i>
Tree	discard-unprotected-dest-mac
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Action taken after a relearn request for protected MAC
Context	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i> fdb saps protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Description	This command configures how the system handles relearn requests for protected MAC addresses.
Options	sap-oper-down, alarm-only, discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
Description	<p>Commands in this context bind a service to an existing service destination point (SDP).</p> <p>A spoke SDP is treated like a traditional bridge port where flooded traffic received on the spoke SDP is replicated on all other ports (other spoke and mesh SDPs or SAPs) and not transmitted on the port it was received.</p> <p>The SDP has an operational state which determines the operational state of the SDP within the service. For example, if the SDP is administratively or operationally down, the SDP for the service is down.</p> <p>The SDP must already be defined in the configure service sdp context to associate an SDP with a VPLS service.</p> <p>SDPs must be explicitly associated and bound to a service. If an SDP is not bound to a service, no far-end devices can participate in the service</p>

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis SDP binding ID
Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id*
Tree [spoke-sdp](#)
String length 3 to 16
String format 'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

accounting-policy *reference*

Synopsis Policy to collect accounting statistics
Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [accounting-policy](#) *reference*
Tree [accounting-policy](#)
Reference **configure** [log accounting-policy](#) *number*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service
Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [admin-state](#) *keyword*
Tree [admin-state](#)
Options enable, disable
Default enable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

adv-service-mtu *number*

Synopsis	Advertise service MTU value
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> adv-service-mtu <i>number</i>
Tree	adv-service-mtu
Description	<p>This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP. The router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.</p> <p>This command cannot be configured on a spoke-SDP that is bound to an SDP with the adv-mtu-override command.</p>
Range	0 to 9782
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

block-on-mesh-failure *boolean*

Synopsis	Enable blocking after all SDPs are operationally down
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> block-on-mesh-failure <i>boolean</i>
Tree	block-on-mesh-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bpdu-translation *keyword*

Synopsis	BPDU format
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> bpdu-translation <i>keyword</i>
Tree	bpdu-translation
Options	auto, pvst, stp, pvst-rw, auto-rw
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure <i>service vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> collect-stats <i>boolean</i>
Tree	<i>collect-stats</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

control-word *boolean*

Synopsis	Use the control word as preferred
Context	configure <i>service vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> control-word <i>boolean</i>
Tree	<i>control-word</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>service vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> description <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

Synopsis	Enter the dhcp context
Context	configure <i>service vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> dhcp
Tree	<i>dhcp</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> dhcp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snoop *boolean*

Synopsis	Allow DHCP snooping of DHCP messages on the SAP or SDP
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> dhcp snoop <i>boolean</i>
Tree	snoop
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> dhcp6
Tree	dhcp6
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> dhcp6 description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	26.7.R1
Platforms	7705 SAR Gen 2

ldra

Synopsis	Enable the ldra context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> dhcp6 ldra
Tree	ldra
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

interface-type *keyword*

Synopsis	LDRA interface type
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> dhcp6 ldra interface-type <i>keyword</i>
Tree	interface-type
Description	This command configures this end point as a client-facing or network-facing interface. Spoke-SDP bindings, mesh-SDP bindings, and BGP EVPN service tunnels must be configured as a network-facing interface.
Options	client-facing – Untrusted client-facing interface network-facing – Network-facing interface
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mfib-allowed-mda-destinations

Synopsis	Enter the mfib-allowed-mda-destinations context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress mfib-allowed-mda-destinations
Tree	mfib-allowed-mda-destinations
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mda [**mda-id**] *slot-mda*

Synopsis	Add a list entry for mda
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress mfib-allowed-mda-destinations mda <i>slot-mda</i>
Tree	mda
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mda-id] *slot-mda*

Synopsis	MFIB allowed MDA destination
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress mfib-allowed-mda-destinations mda <i>slot-mda</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group <i>group-name</i> <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue-group instance ID
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network port-redirect-group <i>instance</i> <i>number</i>
Tree	instance
Range	1 to 65535

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress MPLS VC label to send packets to the far end
 Context **configure** *service vpls service-name spoke-sdp sdp-bind-id egress vc-label number*
 Tree *vc-label*
 Range 16 to 1048575
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

endpoint

Synopsis Enter the **endpoint** context
 Context **configure** *service vpls service-name spoke-sdp sdp-bind-id endpoint*
 Tree *endpoint*
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of service endpoint to which SDP bind is attached
 Context **configure** *service vpls service-name spoke-sdp sdp-bind-id endpoint name reference*
 Tree *name*
 Reference **configure** *service vpls service-name endpoint named-item*
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

precedence (*number* | *keyword*)

Synopsis	Precedence of this SDP bind when there are multiple SDP binds attached to one service endpoint
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>endpoint</i> precedence (<i>number</i> <i>keyword</i>)
Tree	<i>precedence</i>
Range	1 to 4
Options	primary
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> entropy-label
Tree	<i>entropy-label</i>
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> eth-cfm
Tree	<i>eth-cfm</i>
Description	Commands in this context configure the Ethernet CFM command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Synopsis	Enter the mep list instance
Context	configure <i>service</i> <i>vpls</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i>

Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain admin-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain admin-name association admin-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ais

Synopsis	Enable the ais context
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Description	Commands in this context enable the reception of AIS messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level <i>number</i>
Tree	client-meg-level
Description	This command configures the client Maintenance Entity Group (MEG) level to use for AIS message generation. One restriction is that the client MEG level must be higher than the local MEG level. Only the lowest client MEG level is used for facility MEPs.
Range	1 to 7
Max. instances	7
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support <i>boolean</i>
Tree	interface-support
Description	<p>When configured to true, the system enables the generation of AIS PDUs based on the associated endpoint state.</p> <p>AIS on Down MEPs triggers and clears based on the operational status of the entity it is configured on. If CCM is configured to true, transmission of the AIS PDU is based on either the nonoperational state of the entity or on any CCM defect conditions. AIS generation ceases if both the operational state is up and CCM has no defect conditions. If the MEP is not enabled with CCM, the operational state of the entity is the only consideration, assuming the command is present for the MEP.</p> <p>When configured to false, the generation of AIS PDUs is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure service vpls service-name spoke-sdp sdp-bind-id eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval <i>number</i>
Tree	interval
Range	1 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>low-priority-defect</i> <i>keyword</i>
Tree	low-priority-defect
Options	all-def – Generate AIS frame for any defect in CCM state machine mac-rem-err-xcon – Generate AIS frame for def-mac-status defect or higher
Default	all-def
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>priority</i> <i>number</i>
Tree	priority
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
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Context	configure <i>service vpls</i> <i>service-name spoke-sdp</i> <i>sdp-bind-id eth-cfm mep</i> <i>md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i>
Tree	<i>ccm-ltm-priority</i>
Range	0 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>service vpls</i> <i>service-name spoke-sdp</i> <i>sdp-bind-id eth-cfm mep</i> <i>md-admin-name reference ma-admin-name reference mep-id number description description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	configure <i>service vpls</i> <i>service-name spoke-sdp</i> <i>sdp-bind-id eth-cfm mep</i> <i>md-admin-name reference ma-admin-name reference mep-id number direction keyword</i>
Tree	<i>direction</i>
Description	This command configures the direction in which the MEP faces on the bridge port.
Options	down – Send ETH-CFM messages toward the MAC relay entity up – Send ETH-CFM messages away from the MAC relay entity
Default	down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-test

Synopsis	Enable the eth-test context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> eth-test bit-error-threshold <i>number</i>
Tree	bit-error-threshold
Range	0 to 11840
Units	bit errors
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

test-pattern

Synopsis	Enter the test-pattern context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep <i>md-admin-name</i> reference ma-admin-name reference mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i>
Tree	fault-propagation
Options	use-if-status-tlv – Use the interface TLV suspend-ccm – Suspend continuity check messages
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-unicast-address-no-zero*

Synopsis	MAC address of the MEP
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>mac-unicast-address-no-zero</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Units	seconds
Default	3
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

fdb

Synopsis Enter the **fdb** context

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* **fdb**

Tree [fdb](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

auto-learn-mac-protect *boolean*

Synopsis Populate automatically MAC protect list with source MAC addresses learned on SDP

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [fdb](#) **auto-learn-mac-protect** *boolean*

Tree [auto-learn-mac-protect](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

auto-learn-mac-protect-exclude-list *reference*

Synopsis Referenced MAC protect exclusion list name

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [fdb](#) **auto-learn-mac-protect-exclude-list** *reference*

Tree [auto-learn-mac-protect-exclude-list](#)

Description This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.

Reference **configure** [service](#) [mac-list](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

discard-unknown-source *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> fdb discard-unknown-source <i>boolean</i>
Tree	discard-unknown-source
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit-mac-move *keyword*

Synopsis	MAC move
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> fdb limit-mac-move <i>keyword</i>
Tree	limit-mac-move
Options	blockable, non-blockable
Default	blockable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-learning

Synopsis	Enter the mac-learning context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> fdb mac-learning
Tree	mac-learning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aging *boolean*

Synopsis	Enable aging of MAC addresses
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> fdb mac-learning aging <i>boolean</i>
Tree	aging
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learning *boolean*

Synopsis	Enable learning of new MAC addresses
Context	configure service vpls service-name spoke-sdp sdp-bind-id fdb mac-learning learning <i>boolean</i>
Tree	learning
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-pinning *boolean*

Synopsis	MAC address pinning in active status
Context	configure service vpls service-name spoke-sdp sdp-bind-id fdb mac-pinning <i>boolean</i>
Tree	mac-pinning
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-mac-addresses *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	configure service vpls service-name spoke-sdp sdp-bind-id fdb maximum-mac-addresses <i>number</i>
Tree	maximum-mac-addresses
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this spoke SDP.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> <p>When the configured limit is reached and the configure service spoke-sdp fdb discard-unknown-source command is set to true for this spoke SDP, packets with unknown source MAC addresses are discarded. If discard-unknown-source is set to false, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p>

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the spoke SDP uses the global MAC learning limitations.

Range	1 to 511999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protected-src-mac-violation-action *keyword*

Synopsis	Action taken after a relearn request for protected MAC
Context	configure service vpls service-name spoke-sdp sdp-bind-id fdb protected-src-mac-violation-action <i>keyword</i>
Tree	protected-src-mac-violation-action
Description	This command configures how the system handles relearn requests for protected MAC addresses.
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-vc-forwarding *keyword*

Synopsis	VLAN tag processing action
Context	configure service vpls service-name spoke-sdp sdp-bind-id force-vc-forwarding <i>keyword</i>
Tree	force-vc-forwarding
Description	<p>This command configures the VLAN tag processing used on the service.</p> <p>The vlan option configures the router to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag, which is sent in the customer frame to the EVPN destinations.</p> <p>The qinq-c-tag-c-tag option configures the router to pushes two tags with the same value derived from the inner service delimiting tag. At network ingress, two VLAN tags are extracted at most and the C-tag and S-tag p/de bits are propagated to the egress SAPs.</p> <p>The qinq-s-tag-c-tag option configures the router to push two tags that are copied from the QinQ service-delimiting VLAN values and may be different. At network ingress, two VLAN tags are extracted at most and the p/de bits are propagated to the egress SAP service-delimiting S-tag and C-tag respectively.</p>
Options	vlan – Push VLAN ID and 802.1p bits of service-delimiting qtag qinq-c-tag-c-tag – Push two tags identical to inner service-delimiting tag

	qinq-s-tag-c-tag – Push two tags based on QinQ service-delimiting values
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label

Synopsis	Enable the hash-label context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash label" section of the <i>7705 SAR Gen 2 MPLS Guide</i> .
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping
Tree	igmp-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis	Maximum group source combinations
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Range	1 to 32000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups

Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-sources *number*

Synopsis	Maximum sources that are allowed per group
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-queries *boolean*

Synopsis	Generate IGMP general queries
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping send-queries <i>boolean</i>
Tree	send-queries
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-address](#)] *ipv4-multicast-address*

Synopsis	Enter the group list instance
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping static group <i>ipv4-multicast-address</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-address] *ipv4-multicast-address*

Synopsis	Group address of static IGMP multicast channel
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping static group <i>ipv4-multicast-address</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [source-address] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping static group ipv4-multicast-address starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version keyword

Synopsis	IGMP protocol version
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> igmp-snooping version keyword
Tree	version
Options	1, 2, 3
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-standby-signaling boolean

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ignore-standby-signaling boolean
Tree	ignore-standby-signaling
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress
Tree	ingress

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos
Tree	qos
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

network

Synopsis Enter the **network** context

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [ingress qos network](#)

Tree [network](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [ingress qos network fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-name *reference*

Synopsis Name of the forwarding plane queue group template

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [ingress qos network fp-redirect-group](#) *group-name* *reference*

Tree [group-name](#)

Reference **configure** [qos queue-group-templates](#) [ingress queue-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

instance *number*

Synopsis Instance of FP ingress queue group for the SDP binding

Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [ingress qos network fp-redirect-group](#) *instance* *number*

Tree [instance](#)

Range 1 to 65535

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l2pt

Synopsis	Enter the l2pt context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt
Tree	l2pt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

termination

Synopsis	Enable the termination context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination
Tree	termination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocols

Synopsis	Enter the protocols context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols
Tree	protocols
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols cdp boolean
Tree	cdp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dtp boolean

Synopsis	Enable dynamic trunking protocol
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols dtp boolean
Tree	dtp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pagp boolean

Synopsis	Enable port aggregation protocol
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols pagp boolean
Tree	pagp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp boolean

Synopsis	Enable all spanning tree protocols
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols stp boolean
Tree	stp
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udld boolean

Synopsis	Enable unidirectional link detection
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols udld boolean
Tree	udld
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vtp boolean

Synopsis	Enable virtual trunk protocol
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> l2pt termination protocols vtp boolean
Tree	vtp

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld-snooping

Synopsis	Enter the mld-snooping context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping
Tree	mld-snooping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping fast-leave <i>boolean</i>
Tree	fast-leave
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options <i>policy-statement</i> <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum groups allowed
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Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping mrouter-port <i>boolean</i>
Tree	mrouter-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 50

Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping robust-count <i>number</i>
Tree	robust-count
Range	2 to 7
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable IP router alert check option
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

send-queries *boolean*

Synopsis Generate IGMP general queries
 Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [mld-snooping](#) [send-queries](#) *boolean*
 Tree [send-queries](#)
 Default false
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

static

Synopsis Enter the **static** context
 Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [mld-snooping](#) [static](#)
 Tree [static](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

group [[group-address](#)] *ipv6-multicast-address*

Synopsis Enter the **group** list instance
 Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [mld-snooping](#) [static](#) [group](#) *ipv6-multicast-address*
 Tree [group](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[group-address] *ipv6-multicast-address*

Synopsis Group address of multicast channel
 Context **configure** [service vpls](#) *service-name* [spoke-sdp](#) *sdp-bind-id* [mld-snooping](#) [static](#) [group](#) *ipv6-multicast-address*
 Tree [group](#)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping <i>static group</i> <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping <i>static group</i> <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping <i>static group</i> <i>ipv6-multicast-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> mld-snooping version <i>keyword</i>
Tree	version
Options	1, 2
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis	Operational group that affects state of the SDP bind
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group identifier
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> oper-group <i>reference</i>
Tree	oper-group
Reference	configure service oper-group <i>named-item</i>
Notes	The following elements are part of a choice: monitor-oper-group or oper-group .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pw-status

Synopsis	Enter the pw-status context
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Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> pw-status
Tree	pw-status
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signaling *boolean*

Synopsis	Enable the use of pseudowire status signaling
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> pw-status signaling <i>boolean</i>
Tree	signaling
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the split horizon group where the spoke SDP bind belongs to
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> split-horizon-group <i>reference</i>
Tree	split-horizon-group
Reference	configure service vpls <i>service-name</i> split-horizon-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp

Synopsis	Enter the stp context
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> stp
Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of STP
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> stp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-edge *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> stp auto-edge <i>boolean</i>
Tree	auto-edge
Description	<p>When configured to true, the router automatically detects the edge port characteristics of the SAP or spoke SDP. The STP concludes there is no bridge behind the spoke SDP, the OPER_EDGE variable is dynamically set to true. If a BPDU is received, the OPER_EDGE variable is dynamically set to false.</p> <p>When configured to false, the router disables automatic detection.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

edge-port *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> stp edge-port <i>boolean</i>
Tree	edge-port
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-type *keyword*

Synopsis	Configure STP link-type
Context	configure service vpls <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> stp link-type <i>keyword</i>

Tree	link-type
Options	pt-pt, shared
Default	pt-pt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-cost *number*

Synopsis	Configure path-cost
Context	configure service vpls service-name spoke-sdp sdp-bind-id stp path-cost <i>number</i>
Tree	path-cost
Range	1 to 200000000
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-num *number*

Synopsis	Virtual port number
Context	configure service vpls service-name spoke-sdp sdp-bind-id stp port-num <i>number</i>
Tree	port-num
Range	1 to 2047
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Configure STP priority
Context	configure service vpls service-name spoke-sdp sdp-bind-id stp priority <i>number</i>
Tree	priority
Range	0 to 255
Default	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root-guard *boolean*

Synopsis	Enable/disable STP root-guard
Context	configure <i>service vpls service-name spoke-sdp sdp-bind-id stp root-guard boolean</i>
Tree	<i>root-guard</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	configure <i>service vpls service-name spoke-sdp sdp-bind-id vc-type keyword</i>
Tree	<i>vc-type</i>
Options	ether, vlan
Default	ether
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-vc-tag *number*

Synopsis	SDP bind VC tag
Context	configure <i>service vpls service-name spoke-sdp sdp-bind-id vlan-vc-tag number</i>
Tree	<i>vlan-vc-tag</i>
Range	0 to 4094
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stp

Synopsis	Enter the stp context
Context	configure <i>service vpls service-name stp</i>

Tree	stp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of STP
Context	configure service vpls <i>service-name</i> stp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward-delay *number*

Synopsis	Configure forward-delay
Context	configure service vpls <i>service-name</i> stp forward-delay <i>number</i>
Tree	forward-delay
Range	4 to 30
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-time *number*

Synopsis	Configure hello-time
Context	configure service vpls <i>service-name</i> stp hello-time <i>number</i>
Tree	hello-time
Range	1 to 10
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-count *number*

Synopsis	Configure BPDU transmit hold count
Context	configure <i>service vpls service-name stp hold-count number</i>
Tree	<i>hold-count</i>
Range	1 to 20
Default	6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-age *number*

Synopsis	Configure maximum STP information age
Context	configure <i>service vpls service-name stp maximum-age number</i>
Tree	<i>maximum-age</i>
Range	6 to 40
Default	20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Configure protocol version
Context	configure <i>service vpls service-name stp mode keyword</i>
Tree	<i>mode</i>
Options	rstp, comp-dot1w, dot1w, mstp, pmstp
Default	rstp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-instance [*mst-inst-number*] *number*

Synopsis	Enter the mst-instance list instance
Context	configure <i>service vpls service-name stp mst-instance number</i>
Tree	<i>mst-instance</i>

Max. instances	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[mst-inst-number] *number*

Synopsis	Multiple Spanning Tree Instance number
Context	configure <i>service vpls service-name stp mst-instance number</i>
Tree	<i>mst-instance</i>
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-priority *number*

Synopsis	Priority of multiple spanning tree instance
Context	configure <i>service vpls service-name stp mst-instance number mst-priority number</i>
Tree	<i>mst-priority</i>
Range	0 4096 8192 12288 16384 20480 24576 28672 32768 36864 40960 45056 49152 53248 57344 61440
Default	32768
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-range [*range*] *string*

Synopsis	Add a list entry for vlan-range
Context	configure <i>service vpls service-name stp mst-instance number vlan-range string</i>
Tree	<i>vlan-range</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[range] string

Synopsis	Range of VLANs associated with the M-VPLS SAP
Context	configure service vpls <i>service-name</i> stp mst-instance <i>number</i> vlan-range <i>string</i>
Tree	vlan-range
String format	'range' must be Q-tag or low..high VLAN range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-maximum-hops number

Synopsis	Maximum number of hops in an MSTP region
Context	configure service vpls <i>service-name</i> stp mst-maximum-hops <i>number</i>
Tree	mst-maximum-hops
Range	1 to 40
Default	20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-name named-item

Synopsis	MST region name
Context	configure service vpls <i>service-name</i> stp mst-name <i>named-item</i>
Tree	mst-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mst-revision number

Synopsis	MST configuration revision
Context	configure service vpls <i>service-name</i> stp mst-revision <i>number</i>
Tree	mst-revision

Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	STP bridge priority
Context	configure service vpls <i>service-name</i> stp priority <i>number</i>
Tree	priority
Range	0 to 65535
Default	32768
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

temp-flooding *number*

Synopsis	Temporary flooding
Context	configure service vpls <i>service-name</i> temp-flooding <i>number</i>
Tree	temp-flooding
Range	3 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-elmi *boolean*

Synopsis	Allow E-LMI tunneling
Context	configure service vpls <i>service-name</i> tunnel-elmi <i>boolean</i>
Tree	tunnel-elmi
Description	<p>When configured to true, the router allows E-LMI packets in a VPLS service to be tunneled. The following must also be the case for this command to function:</p> <ul style="list-style-type: none">• the configure port ethernet elmi mode uni-n command is not configured• the E-LMI packets map to that VPLS service <p>When configured to false, tunneling of the E-LMI packets for a VPLS service is disabled.</p>
Default	false

Introduced	25.10.R2
Platforms	7705 SAR Gen 2

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	configure service vpls <i>service-name</i> vpn-id <i>number</i>
Tree	vpn-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn [**service-name**] *service-name*

Synopsis	Enter the vprn list instance
Context	configure service vprn <i>service-name</i>
Tree	vprn
Description	Commands in this context create or edit a VPRN service instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[service-name] *service-name*

Synopsis	Administrative service name
Context	configure service vprn <i>service-name</i>
Tree	vprn
Description	<p>This command creates or edits a service instance.</p> <p>When a service is created, the customer keyword and <i>customer-id</i> must be specified and associates the service with a customer. The <i>customer-id</i> must already exist having been created using the customer command in the service context. When a service is created with a customer association, it is not possible to edit the customer association. The service must be deleted and re-created with a new customer association.</p>

When a service is created, the use of the **customer***customer-id* is optional to navigate into the service configuration context. If attempting to edit a service with the incorrect *customer-id* results in an error.

This command specifies the unique service identification number identifying the service in the service domain. This ID must be unique to this service and may not be used for any other service of any type. The service ID must be the same number used for every platform on which this service is defined.

String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aaa

Synopsis	Enter the aaa context
Context	configure service vprn <i>service-name</i> aaa
Tree	aaa
Description	Commands in this context configure AAA in the VPRN.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-servers

Synopsis	Enter the remote-servers context
Context	configure service vprn <i>service-name</i> aaa remote-servers
Tree	remote-servers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius

Synopsis	Enable the radius context
Context	configure service vprn <i>service-name</i> aaa remote-servers radius
Tree	radius
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

access-algorithm *keyword*

Synopsis Algorithm used to access the set of RADIUS servers

Context **configure** [service vprn](#) *service-name* [aaa remote-servers radius access-algorithm](#) *keyword*

Tree [access-algorithm](#)

Options direct, round-robin

Default direct

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

accounting *boolean*

Synopsis Enable RADIUS command accounting

Context **configure** [service vprn](#) *service-name* [aaa remote-servers radius accounting](#) *boolean*

Tree [accounting](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

accounting-port *number*

Synopsis Port number on RADIUS server for accounting requests

Context **configure** [service vprn](#) *service-name* [aaa remote-servers radius accounting-port](#) *number*

Tree [accounting-port](#)

Range 1 to 65535

Default 1813

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the authentication server

Context	configure service vprn <i>service-name</i> aaa remote-servers radius admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authorization *boolean*

Synopsis	Enable RADIUS authorization
Context	configure service vprn <i>service-name</i> aaa remote-servers radius authorization <i>boolean</i>
Tree	authorization
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interactive-authentication *boolean*

Synopsis	Enable RADIUS interactive authentication
Context	configure service vprn <i>service-name</i> aaa remote-servers radius interactive-authentication <i>boolean</i>
Tree	interactive-authentication
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	UDP port to communicate with the RADIUS server
Context	configure service vprn <i>service-name</i> aaa remote-servers radius port <i>number</i>
Tree	port
Range	1 to 65535
Default	1812
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure service vprn <i>service-name</i> aaa remote-servers radius server <i>number</i>
Tree	server
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	RADIUS server ID
Context	configure service vprn <i>service-name</i> aaa remote-servers radius server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure service vprn <i>service-name</i> aaa remote-servers radius server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authenticator *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	configure service vprn <i>service-name</i> aaa remote-servers radius server <i>number</i> authenticator <i>keyword</i>
Tree	authenticator

Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Options	md5, sm3
Default	md5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secret *encrypted-leaf*

Synopsis	Secret key for RADIUS over UDP
Context	configure service vpn <i>service-name</i> aaa remote-servers radius server <i>number</i> secret <i>encrypted-leaf</i>
Tree	secret
Description	<p>This command specifies the secret key and enables RADIUS over UDP for the RADIUS server.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7505 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS profile for RADIUS over TLS
Context	configure service vpn <i>service-name</i> aaa remote-servers radius server <i>number</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	<p>This command specifies the TLS profile and enables RADIUS over TLS for the RADIUS server.</p> <p>When a TLS profile is assigned to a RADIUS server, the communication automatically switches from UDP to TCP, if a secret key is also configured. When a TLS profile is removed from a RADIUS server, the communication automatically switches from TCP to UDP, if a secret key is also configured. In both cases, the server is not recreated internally, so statistics are preserved.</p>
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

server-retry *number*

Synopsis Number of attempts to retry contacting RADIUS server

Context **configure** [service vpn](#) *service-name* [aaa remote-servers radius server-retry](#) *number*

Tree [server-retry](#)

Range 1 to 10

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

server-timeout *number*

Synopsis Time to wait for a response from the RADIUS server

Context **configure** [service vpn](#) *service-name* [aaa remote-servers radius server-timeout](#) *number*

Tree [server-timeout](#)

Range 1 to 90

Units seconds

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

use-default-template *boolean*

Synopsis Apply the RADIUS default user template to RADIUS user

Context **configure** [service vpn](#) *service-name* [aaa remote-servers radius use-default-template](#) *boolean*

Tree [use-default-template](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tacplus

Synopsis	Enable the tacplus context
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus
Tree	tacplus
Description	Commands in this context configure TACACS+ in the VPRN.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting

Synopsis	Enable the accounting context
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus accounting
Tree	accounting
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record-type *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus accounting record-type <i>keyword</i>
Tree	record-type
Options	start-stop, stop-only
Default	stop-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the TACACS+ protocol
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authorization

Synopsis	Enable the authorization context
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus authorization
Tree	authorization
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

request-format

Synopsis	Enter the request-format context
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus authorization request-format
Tree	request-format
Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access-operation-cmd *keyword*

Synopsis	Access operations sent in authorization requests
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus authorization request-format access-operation-cmd <i>keyword</i>
Tree	access-operation-cmd
Description	<p>This command sends an operation argument in authorization requests.</p> <p>In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.</p>
Options	delete
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-priv-lvl *boolean*

Synopsis	Allow privilege level mapping
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus authorization use-priv-lvl <i>boolean</i>
Tree	use-priv-lvl
Description	<p>When configured to true, this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the priv-lvl-map) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except enable-admin). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except enable-admin).</p> <p>When configured to false, each command is sent to the TACACS+ server for authorization (this is true regardless of whether the tacplus use-default-template setting is enabled).</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-unknown-mandatory-vsas *boolean*

Synopsis	Ignore unknown mandatory VSAs and fail authentication
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus ignore-unknown-mandatory-vsas <i>boolean</i>
Tree	ignore-unknown-mandatory-vsas
Description	<p>When configured to true, the system ignores unknown mandatory VSAs and authentication succeeds.</p> <p>When configured to false, the system ignores unknown mandatory VSAs received in a reply from the TACACS+ server. Authentication fails and the user is disconnected because the system cannot process a mandatory VSA that is unknown.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interactive-authentication *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus interactive-authentication <i>boolean</i>

Tree	interactive-authentication
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priv-lvl-map

Synopsis	Enter the priv-lvl-map context
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus priv-lvl-map
Tree	priv-lvl-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priv-lvl [[level](#)] *number*

Synopsis	Enter the priv-lvl list instance
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i>
Tree	priv-lvl
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level] *number*

Synopsis	Privilege level for the mapping
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i>
Tree	priv-lvl
Range	0 to 15
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-profile-name *reference*

Synopsis	User profile for the mapping
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Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> user-profile-name <i>reference</i>
Tree	user-profile-name
Reference	configure system security aaa local-profiles profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i>
Tree	server
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	TACACS+ server ID
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the TACACS+ server
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	TCP port to communicate with the TACACS+ server
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	49
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secret *encrypted-leaf*

Synopsis	Secret key to access the TACACS+ server
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> secret <i>encrypted-leaf</i>
Tree	secret
Description	<p>This command specifies the secret key to access the TACACS+ server in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	0 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-connection

Synopsis	Enter the tls-connection context
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> tls-connection
Tree	tls-connection
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

sni

Synopsis	Enter the sni context
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> tls-connection sni
Tree	sni
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

host-name *fully-qualified-domain-name*

Synopsis	Server DNS host name sent as TLS SNI when connecting to the TACACS+ server.
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> tls-connection sni host-name <i>fully-qualified-domain-name</i>
Tree	host-name
String length	1 to 253
String format	'host-name' must contain valid lowercase 1 to 63 character DNS labels
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS client profile for the TACACS+ server TLS connection.
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> tls-connection tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

tls-port *number*

Synopsis	TCP port for the TLS connection to the TACACS+ server.
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus server <i>number</i> tls-connection tls-port <i>number</i>
Tree	tls-port

Range	0 1 to 65535
Default	300
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

server-retry-timeout (*number* | *keyword*)

Synopsis	Time before retrying requests when health checks are disabled
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus server-retry-timeout (<i>number</i> <i>keyword</i>)
Tree	server-retry-timeout
Description	This command configures the maximum timeout before retrying requests when health checks are disabled and all TACACS+ servers are operationally down. Set the value of this timer to a lower value or disable it to increase the interactive responsiveness of AAA requests after the servers become unreachable.
Range	1 to 300
Units	seconds
Options	none – Disable retry timeout and send requests immediately
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-timeout *number*

Synopsis	Time to wait for a response from the TACACS+ server
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-request

Synopsis	Enter the service-request context
Context	configure service vprn service-name aaa remote-servers tacplus service-request
Tree	service-request
Description	Commands in this context enable Nokia services to be requested from the TACACS+ server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-grpc-rpc-authorization *boolean*

Synopsis	Request nokia-grpc-rpc-authorization service VSAs
Context	configure service vprn service-name aaa remote-servers tacplus service-request nokia-grpc-rpc-authorization <i>boolean</i>
Tree	nokia-grpc-rpc-authorization
Description	When configured to true , the nokia-grpc-rpc-authorization service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-netconf-base-op-authorization *boolean*

Synopsis	Request nokia-netconf-base-op-authorization service VSAs
Context	configure service vprn service-name aaa remote-servers tacplus service-request nokia-netconf-base-op-authorization <i>boolean</i>
Tree	nokia-netconf-base-op-authorization
Description	When configured to true , the nokia-netconf-base-op-authorization service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-user *boolean*

Synopsis	Request nokia-user service VSAs
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus service-request nokia-user <i>boolean</i>
Tree	nokia-user
Description	When configured to true , the nokia-user service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-user-profile *boolean*

Synopsis	Request nokia-user-profile service VSAs
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus service-request nokia-user-profile <i>boolean</i>
Tree	nokia-user-profile
Description	When configured to true , the nokia-user-profile service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

single-connection *boolean*

Synopsis	Enable TACACS+ single connection mode
Context	configure service vpn <i>service-name</i> aaa remote-servers tacplus single-connection <i>boolean</i>
Tree	single-connection
Description	When configured to true , the router maintains a persistent TCP connection open to the server to reduce the communication overhead for each request. When configured to false , the router opens a new TCP connection for each request.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

use-default-template *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	configure service vprn <i>service-name</i> aaa remote-servers tacplus use-default-template <i>boolean</i>
Tree	use-default-template
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the service
Context	configure service vprn <i>service-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregates

Synopsis	Enter the aggregates context
Context	configure service vprn <i>service-name</i> aggregates
Tree	aggregates
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the aggregate list instance
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aggregate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aggregate
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregator

Synopsis	Enter the aggregator context
Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator
Tree	aggregator
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Aggregator IP address
Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Aggregator AS number
Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-set boolean

Synopsis	Use AS_SET path segment type for the aggregate route
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) as-set <i>boolean</i>
Tree	as-set
Description	When configured to true , the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes. When configured to false , the AS_PATH attribute contains no AS_SET and will be originated by the ESR.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole

Synopsis	Enable the blackhole context
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole
Tree	blackhole
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate-icmp boolean

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole generate-icmp <i>boolean</i>
Tree	generate-icmp
Description	When configured to true , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to false , ICMP unreachable messages are not generated.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community name that is added to the aggregate route
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) community <i>community</i>
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String length	1 to 72
Max. instances	12
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) discard-component-communities <i>boolean</i>
Tree	discard-component-communities

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

indirect (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	indirect
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	configure service vprn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) local-preference <i>number</i>
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy *reference*

Synopsis	Policy name for the aggregated route
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Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) policy <i>reference</i>
Tree	policy
Description	<p>This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.</p> <p>If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary-only *boolean*

Synopsis	Advertise the aggregate route only
Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) summary-only <i>boolean</i>
Tree	summary-only
Description	<p>When configured to true, the router suppresses the advertisement of more specific component routes for the aggregate.</p> <p>When configured to false, the router advertises both the aggregate route and its contributing routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel-group *number*

Synopsis	Tunnel group from which to associate the MC IPSec state
Context	configure service vpn <i>service-name</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) tunnel-group <i>number</i>
Tree	tunnel-group
Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

allow-export-bgp-vpn *boolean*

Synopsis Include BGP-VPN routes for export

Context **configure** *service vpn service-name* **allow-export-bgp-vpn** *boolean*

Tree **allow-export-bgp-vpn**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

autonomous-system *number*

Synopsis AS number advertised to peers for this router

Context **configure** *service vpn service-name* **autonomous-system** *number*

Tree **autonomous-system**

Description This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated.

If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.

Range 1 to 4294967295

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bgp

Synopsis Enable the **bgp** context

Context **configure** *service vpn service-name* **bgp**

Tree **bgp**

Description Commands in this context configure the BGP protocol with the VPRN service.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the BGP instance

Context	configure service vprn <i>service-name</i> bgp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	configure service vprn <i>service-name</i> bgp advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows any inactive BGP route to be advertised, even though it is not the used route.</p> <p>When configured to false, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-ipv6-next-hops

Synopsis	Enter the advertise-ipv6-next-hops context
Context	configure service vprn <i>service-name</i> bgp advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	configure service vprn <i>service-name</i> bgp advertise-ipv6-next-hops ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

aggregator-id-zero *boolean*

Synopsis Set router ID in the BGP AGGREGATOR attribute to 0

Context **configure** *service vpn* *service-name* *bgp aggregator-id-zero boolean*

Tree *aggregator-id-zero*

Description When configured to **true**, the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.

When configured to **false**, the AS number and router ID are added to the AGGREGATOR path attribute.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

asn-4-byte *boolean*

Synopsis Advertise support for 4-byte ASNs

Context **configure** *service vpn* *service-name* *bgp asn-4-byte boolean*

Tree *asn-4-byte*

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

attribute-set

Synopsis Enter the **attribute-set** context

Context **configure** *service vpn* *service-name* *bgp attribute-set*

Tree *attribute-set*

Description Commands in this context configure the handling of attribute set (ATTR_SET) attributes in BGP routes received from PE-CE peers of the VPRN.

ATTR_SET is an optional transitive BGP path attribute standardized by RFC 6368 that is added to BGP L3 VPN routes to provide logical separation between the BGP domain of a customer and the BGP domain of a service provider.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

remove *boolean*

Synopsis	Remove ATTR_SET in received BGP routes from PE-CE peers
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp attribute-set remove</i> <i>boolean</i>
Tree	<i>remove</i>
Description	<p>When configured to true, BGP ignores and silently discards ATTR_SETs in BGP routes received from PE-CE peers of the VPRN. The discarded ATTR_SETs do not affect BGP best path selection in the VPRN, and they do not appear in the VPN-IP routes that result from the VRF export of the BGP routes. Nokia recommends configuring this command to true in most deployments.</p> <p>When configured to false, BGP ignores ATTR_SETs in BGP routes received from PE-CE peers of the VPRN, but does not discard them. This allows the ATTR_SETs to propagate between CE devices connected to the VPRN and to other PE devices when the BGP routes are exported as VPN-IP routes.</p> <p>Note: If the configuration of this command is changed, ROUTE_REFRESH messages are sent to all PE-CE peers of the VPRN.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	BGP authentication key for all peers
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp authentication-key</i> <i>encrypted-leaf</i>
Tree	<i>authentication-key</i>
Description	<p>This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vprn <i>service-name</i> bgp authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-path

Synopsis	Enter the backup-path context
Context	configure service vprn <i>service-name</i> bgp backup-path
Tree	backup-path
Description	<p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure service vprn <i>service-name</i> bgp backup-path ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure service vprn <i>service-name</i> bgp backup-path ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure service vprn <i>service-name</i> bgp backup-path label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Enable support for labeled unicast IPv6 routes
Context	configure service vprn <i>service-name</i> bgp backup-path label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

best-path-selection

Synopsis	Enter the best-path-selection context
Context	configure service vprn <i>service-name</i> bgp best-path-selection
Tree	best-path-selection
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

always-compare-med

Synopsis	Enter the always-compare-med context
Context	configure service vprn <i>service-name</i> bgp best-path-selection always-compare-med
Tree	always-compare-med
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

med-value *keyword*

Synopsis	Action for a missing MED attribute
Context	configure service vprn <i>service-name</i> bgp best-path-selection always-compare-med med-value <i>keyword</i>
Tree	med-value
Options	off, missing-med-zero, missing-med-infinity, on
Default	off
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	configure service vprn <i>service-name</i> bgp best-path-selection always-compare-med strict-as <i>boolean</i>
Tree	strict-as
Description	<p>When configured to true, the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS.</p> <p>When configured to false, the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-path-ignore

Synopsis	Enter the as-path-ignore context
Context	configure service vprn <i>service-name</i> bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	configure service vprn <i>service-name</i> bgp best-path-selection as-path-ignore ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	configure service vprn <i>service-name</i> bgp best-path-selection as-path-ignore ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	configure service vprn <i>service-name</i> bgp best-path-selection as-path-ignore label-ipv4 <i>boolean</i>
Tree	label-ipv4

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Ignore AS path length for labeled unicast IPv6 routes
Context	configure service vprn <i>service-name</i> bgp best-path-selection as-path-ignore label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

compare-origin-validation-state *boolean*

Synopsis	Allow comparison of origin validation states
Context	configure service vprn <i>service-name</i> bgp best-path-selection compare-origin-validation-state <i>boolean</i>
Tree	compare-origin-validation-state
Description	<p>When configured to true, the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state.</p> <p>When configured to false, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

deterministic-med *boolean*

Synopsis	Group paths based on AS before MED attribute comparison
Context	configure service vprn <i>service-name</i> bgp best-path-selection deterministic-med <i>boolean</i>
Tree	deterministic-med
Description	When configured to true , BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to

select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-ibgp-equal

Synopsis	Enter the ebgp-ibgp-equal context
Context	configure service vprn <i>service-name</i> bgp best-path-selection ebgp-ibgp-equal
Tree	ebgp-ibgp-equal
Description	<p>Commands in this context allow BGP to ignore the difference between EBGp and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGp learned route over an IBGP learned route.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Consider EBGp and IBGP IPv4 routes equal
Context	configure service vprn <i>service-name</i> bgp best-path-selection ebgp-ibgp-equal ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Consider EBGp and IBGP IPv6 routes equal
Context	configure service vprn <i>service-name</i> bgp best-path-selection ebgp-ibgp-equal ipv6 boolean

Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Consider EBGp and IBGP label-IPv4 routes equal
Context	configure service vprn <i>service-name</i> bgp best-path-selection ebgp-ibgp-equal label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6 *boolean*

Synopsis	Consider EBGp and IBGP label-IPv6 routes equal
Context	configure service vprn <i>service-name</i> bgp best-path-selection ebgp-ibgp-equal label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-nh-metric *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	configure service vprn <i>service-name</i> bgp best-path-selection ignore-nh-metric <i>boolean</i>
Tree	ignore-nh-metric
Description	<p>When configured to true, BGP ignores the resolved distance to the BGP next hop in its route selection process.</p> <p>When configured to false, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the router context) or IP prefix learned from VPRN BGP peers (in the vprn context).</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-router-id

Synopsis	Enable the ignore-router-id context
Context	configure service vprn <i>service-name</i> bgp best-path-selection ignore-router-id
Tree	ignore-router-id
Description	<p>Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGp paths from different EBGp peers when determining the best path for the specified address families.</p> <p>By default, BGP selects the path with the lower router ID when it compares two paths from EBGp peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-invalid-unusable *boolean*

Synopsis	Ignore routes with invalid origin validation state
Context	configure service vprn <i>service-name</i> bgp best-path-selection origin-invalid-unusable <i>boolean</i>
Tree	origin-invalid-unusable
Description	<p>When configured to true, routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers.</p> <p>When configured to false, routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix, according to the BGP decision process.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure service vprn <i>service-name</i> bgp bfd-liveness <i>boolean</i>

Tree	bfd-liveness
Description	When configured to true , BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations. When configured to false , BFD is not enabled globally for all BGP sessions.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-strict-mode

Synopsis	Enter the bfd-strict-mode context
Context	configure service vprn <i>service-name</i> bgp bfd-strict-mode
Tree	bfd-strict-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure service vprn <i>service-name</i> bgp bfd-strict-mode advertise
Tree	advertise
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none"> • The inherited or configured value for the bfd-liveness command that applies to the peer is true. • The interface associated with the peer has a valid BFD configuration. <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
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Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp bfd-strict-mode advertise holdtime number</i>
Tree	<i>holdtime</i>
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp bfd-strict-mode next-hop-reachability boolean</i>
Tree	<i>next-hop-reachability</i>
Description	<p>When configured to true, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"> • The BFD session to the peer is in a down state. • There is a valid interface BFD configuration that applies to the peer. • There is a valid BFD liveness configuration that applies to the peer. <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is true does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to true only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"> • IPv4 • IPv6 • IPv4 VPN • IPv6 VPN • labeled unicast IPv4 • labeled unicast IPv6

- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-reflect *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	configure service vpn <i>service-name</i> bgp client-reflect <i>boolean</i>
Tree	client-reflect
Description	<p>When configured to true, routes received from neighbors considered to be RR clients are reflected to other peers as expected.</p> <p>When configured to false, routes received from neighbors considered to be RR clients are not reflected to other clients.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster

Synopsis	Enter the cluster context
Context	configure service vpn <i>service-name</i> bgp cluster
Tree	cluster
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster-id *ipv4-address*

Synopsis	Route reflector cluster ID
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Context	configure service vprn <i>service-name</i> bgp cluster cluster-id <i>ipv4-address</i>
Tree	cluster-id
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure service vprn <i>service-name</i> bgp connect-retry <i>number</i>
Tree	connect-retry
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

convergence

Synopsis	Enter the convergence context
Context	configure service vprn <i>service-name</i> bgp convergence
Tree	convergence
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure service vprn <i>service-name</i> bgp convergence family <i>keyword</i>
Tree	family
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[family-type] *keyword*

Synopsis Address family for which convergence selection applies

Context **configure** *service vprn service-name bgp convergence family keyword*

Tree *family*

Options ipv4, ipv6

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-wait-to-advertise *number*

Synopsis Maximum wait time before advertising routes

Context **configure** *service vprn service-name bgp convergence family keyword max-wait-to-advertise number*

Tree *max-wait-to-advertise*

Range 0 to 3600

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

min-wait-to-advertise *number*

Synopsis Minimum wait time before advertising routes

Context **configure** *service vprn service-name bgp convergence min-wait-to-advertise number*

Tree *min-wait-to-advertise*

Range 0 to 3600

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure service vprn <i>service-name</i> bgp damp-peer-oscillations
Tree	damp-peer-oscillations
Description	<p>Commands in this context support the DampPeerOscillations FSM behavior described in section 8.1 of RFC 4271, <i>A Border Gateway Protocol 4 (BGP-4)</i>.</p> <p>When unconfigured, the router does not perform peer oscillation damping and immediately transitions out of the idle state after every reset.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure service vprn <i>service-name</i> bgp damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	<p>This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.</p>
Range	0 to 2048
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure service vprn <i>service-name</i> bgp damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Description	<p>Commands in this context configure how long a BGP peer session remains in the idle state after some type of error causes the session to reset.</p> <p>In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur in a short time period after each session reset cause longer and longer hold times in the idle state.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	configure service vprn <i>service-name</i> bgp damp-peer-oscillations idle-hold-time initial-wait <i>number</i>
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure service vprn <i>service-name</i> bgp damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

second-wait *number*

Synopsis	Time that doubles after each session failure
Context	configure service vprn <i>service-name</i> bgp damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure <i>service vprn service-name</i> <i>bgp damping boolean</i>
Tree	<i>damping</i>
Description	<p>When configured to true, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none">• Half-life: 15 minutes• Max-suppress: 60 minutes• Suppress-threshold: 3000• Reuse-threshold: 750 <p>When configured to false, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure <i>service vprn service-name</i> <i>bgp default-label-preference</i>
Tree	<i>default-label-preference</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure <i>service vprn service-name</i> <i>bgp default-label-preference ebgp number</i>
Tree	<i>ebgp</i>
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
Context	configure service vprn <i>service-name</i> bgp default-label-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-preference

Synopsis	Enter the default-preference context
Context	configure service vprn <i>service-name</i> bgp default-preference
Tree	default-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Default preference for EBGP
Context	configure service vprn <i>service-name</i> bgp default-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
Context	configure service vprn <i>service-name</i> bgp default-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Default	0

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** [service vprn](#) *service-name* [bgp description](#) *description*
Tree [description](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

dynamic-neighbor-limit *number*

Synopsis Max dynamic BGP sessions to accept from remote peers
Context **configure** [service vprn](#) *service-name* [bgp dynamic-neighbor-limit](#) *number*
Tree [dynamic-neighbor-limit](#)
Description This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.

Range 1 to 8192
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ebgp-default-reject-policy

Synopsis Enter the **ebgp-default-reject-policy** context
Context **configure** [service vprn](#) *service-name* [bgp ebgp-default-reject-policy](#)
Tree [ebgp-default-reject-policy](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure service vpn <i>service-name</i> bgp ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure service vpn <i>service-name</i> bgp ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eibgp-loadbalance *boolean*

Synopsis	Use ECMP over BGP VPN and BGP routes
Context	configure service vpn <i>service-name</i> bgp eibgp-loadbalance <i>boolean</i>
Tree	eibgp-loadbalance
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure service vpn <i>service-name</i> bgp enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Description	When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or

the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**).

This command does not flap an established session because it applies only to routes received after the command is issued.

When configured to **false**, received routes are not checked for compliance with the rule.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-handling

Synopsis	Enter the error-handling context
Context	configure service vprn <i>service-name</i> bgp error-handling
Tree	error-handling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

legacy-mode *boolean*

Synopsis	Enable legacy-mode of BGP error handling
Context	configure service vprn <i>service-name</i> bgp error-handling legacy-mode <i>boolean</i>
Tree	legacy-mode
Description	<p>When configured to true, the BGP instance handles the BGP update error messages based on the configured update-fault-tolerance commands. If these commands are not explicitly configured, BGP error handling follows the legacy procedures described in RFC 4271, which can result in disruptive session resets.</p> <p>When configured to false, the BGP instance ignores the configured update-fault-tolerance commands and applies the new error handling procedures described in RFC 7606 on all sessions.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure service vprn <i>service-name</i> bgp error-handling update-fault-tolerance <i>boolean</i>

Tree	update-fault-tolerance
Description	When configured to true , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When configured to false , most errors trigger a session reset.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Enable the export context
Context	configure service vprn <i>service-name</i> bgp export
Tree	export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	configure service vprn <i>service-name</i> bgp export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-nh-encoding

Synopsis	Enter the extended-nh-encoding context
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Context	configure service vprn <i>service-name</i> bgp extended-nh-encoding
Tree	extended-nh-encoding
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure service vprn <i>service-name</i> bgp extended-nh-encoding ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family

Synopsis	Enter the family context
Context	configure service vprn <i>service-name</i> bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-ipv6 *boolean*

Synopsis	Advertise support for the FlowSpec-IPv6 address family
Context	configure service vprn <i>service-name</i> bgp family flow-ipv6 <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	configure service vprn <i>service-name</i> bgp family ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure service vprn <i>service-name</i> bgp family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure service vprn <i>service-name</i> bgp family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure service vprn <i>service-name</i> bgp family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis Advertise support for the MCAST-IPv6 address family

Context **configure** [service vprn](#) *service-name* [bgp family mcast-ipv6](#) *boolean*

Tree [mcast-ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

fast-external-failover *boolean*

Synopsis Drop external BGP session immediately when link fails

Context **configure** [service vprn](#) *service-name* [bgp fast-external-failover](#) *boolean*

Tree [fast-external-failover](#)

Description When configured to **true**, the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down.

When configured to **false**, the BGP session remains up until the hold time expires.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enable the **graceful-restart** context

Context **configure** [service vprn](#) *service-name* [bgp graceful-restart](#)

Tree [graceful-restart](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gr-notification *boolean*

Synopsis Perform Graceful Restart procedures

Context **configure** [service vprn](#) *service-name* [bgp graceful-restart gr-notification](#) *boolean*

Tree	gr-notification
Description	<p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

long-lived

Synopsis	Enable the long-lived context
Context	configure service vprn <i>service-name</i> bgp graceful-restart long-lived
Tree	long-lived
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure service vprn <i>service-name</i> bgp graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	configure service vprn <i>service-name</i> bgp graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis Enter the **family** list instance
Context **configure** *service vprn service-name bgp graceful-restart long-lived family keyword*
Tree *family*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[family-type] *keyword*

Synopsis Address family type for LLGR
Context **configure** *service vprn service-name bgp graceful-restart long-lived family keyword*
Tree *family*
Options ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

advertised-stale-time *number*

Synopsis LLGR stale routes time for family override
Context **configure** *service vprn service-name bgp graceful-restart long-lived family keyword advertised-stale-time number*
Tree *advertised-stale-time*
Range 0 to 16777215
Default 86400
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis Locally-configured stale routes override time

Context	configure service vprn <i>service-name</i> bgp graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure service vprn <i>service-name</i> bgp graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure service vprn <i>service-name</i> bgp graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vpn <i>service-name</i> bgp graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	<p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.</p>
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure service vpn <i>service-name</i> bgp graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restart-time *number*

Synopsis	Restart time advertised by GR capability
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Context	configure service vprn <i>service-name</i> bgp graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure service vprn <i>service-name</i> bgp graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [*group-name*] *named-item-64*

Synopsis	Enter the group list instance
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i>
Tree	group
Description	Commands in this context configure a BGP peer group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item-64*

Synopsis	BGP peer group name
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i>
Tree	group
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicapt IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none">• If the active route for the IP prefix is a BGP route, that route is advertised.• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertise unless the active non-BGP route is matched and accepted by an export policy applied to the session• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session. <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-ipv6-next-hops

Synopsis	Enable the advertise-ipv6-next-hops context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> advertise-ipv6-next-hops ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-override *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> as-override <i>boolean</i>
Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p>

	When configured to false , no AS override is performed.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> asn-4-byte <i>boolean</i>
Tree	<i>asn-4-byte</i>
Description	<p>When this command inherits a value of true, the use of 4-byte ASNs is supported.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, this command disables the use of 4-byte ASNs.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	BGP authentication key for peers in the group
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> authentication-key <i>encrypted-leaf</i>
Tree	<i>authentication-key</i>
Description	<p>This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
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Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enable the bfd context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> bfd
Tree	bfd
Description	Commands in this context configure the BFD command options for the BGP group.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Multiplier for the BFD session
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of consecutive BFD messages that must be missed from the peer before the BFD session state is changed to down and the upper level protocols (OSPF, IS-IS, BGP, or PIM) are notified of the fault.
Range	1 to 20
Default	3
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-interval *number*

Synopsis	Receive interval for the BFD session
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> bfd receive-interval <i>number</i>

Tree	receive-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval for the BFD session
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Type of BFD session endpoint to use
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Processed by the network processor on the CPM auto – System determines the appropriate session type fp – Processed on the forwarding plane hardware
Default	auto
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-strict-mode

Synopsis	Enter the bfd-strict-mode context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> bfd-strict-mode
Tree	bfd-strict-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> bfd-strict-mode advertise
Tree	advertise
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none">• The inherited or configured value for the bfd-liveness command that applies to the peer is true.• The interface associated with the peer has a valid BFD configuration. <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> bfd-strict-mode advertise holdtime <i>number</i>
Tree	holdtime
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP

hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.

Range	1 to 65535
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-reachability *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> bfd-strict-mode next-hop-reachability <i>boolean</i>
Tree	next-hop-reachability
Description	<p>When configured to true, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"> • The BFD session to the peer is in a down state. • There is a valid interface BFD configuration that applies to the peer. • There is a valid BFD liveness configuration that applies to the peer. <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is true does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to true only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"> • IPv4 • IPv6 • IPv4 VPN • IPv6 VPN • labeled unicast IPv4 • labeled unicast IPv6 • EVPN • IPv4 multicast • IPv6 multicast

- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

capability-negotiation *boolean*

Synopsis Enable capability negotiation

Context **configure** [service vpn](#) *service-name* [bgp group](#) *named-item-64* [capability-negotiation](#) *boolean*

Tree [capability-negotiation](#)

Description When configured to **true**, this command enables the exchange of capabilities.
When configured to **false** and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

client-reflect *boolean*

Synopsis Allow cluster RR to advertise routes to its clients

Context **configure** [service vpn](#) *service-name* [bgp group](#) *named-item-64* [client-reflect](#) *boolean*

Tree [client-reflect](#)

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When the command inherits a value of **true**, client reflection of routes is enabled.

When configured to **false**, this command disables client reflection of routes.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cluster

Synopsis Enter the **cluster** context

Context **configure** [service vpn](#) *service-name* [bgp group](#) *named-item-64* [cluster](#)

Tree	cluster
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster-id *ipv4-address*

Synopsis	Route reflector cluster ID
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> cluster cluster-id <i>ipv4-address</i>
Tree	cluster-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> damp-peer-oscillations
Tree	damp-peer-oscillations
Description	<p>Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.</p> <p>When unconfigured, command settings are inherited from the global-level configuration.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> <i>damp-peer-oscillations</i> <i>error-interval</i> <i>number</i>
Tree	<i>error-interval</i>
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i>
Tree	<i>idle-hold-time</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>initial-wait</i> <i>number</i>
Tree	<i>initial-wait</i>
Range	0 to 2048
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> damping <i>boolean</i>
Tree	damping
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> default-label-preference

Tree	default-label-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
Context	configure service vprn <i>service-name</i> bgp group named-item-64 default-label-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn <i>service-name</i> bgp group named-item-64 default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-preference

Synopsis	Enter the default-preference context
Context	configure service vprn <i>service-name</i> bgp group named-item-64 default-preference
Tree	default-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
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Context	configure service vprn service-name bgp group named-item-64 default-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
Context	configure service vprn service-name bgp group named-item-64 default-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn service-name bgp group named-item-64 description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-neighbor

Synopsis	Enter the dynamic-neighbor context
Context	configure service vprn service-name bgp group named-item-64 dynamic-neighbor
Tree	dynamic-neighbor
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>reference</i>
Tree	interface
Description	<p>Commands in this context configure an unnumbered VPRN access IP interface for dynamic neighbors.</p> <p>If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.</p> <p>The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.</p> <p>When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGp, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *reference*

Synopsis	Name of the dynamic neighbor interface
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>reference</i>
Tree	interface
Reference	configure service vprn <i>service-name</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
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Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>reference</i> allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> . All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
String format	'allowed-peer-as' must be 4-byte decimal AS number or AS..AS range
Max. instances	32
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sessions *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor interface <i>reference</i> max-sessions <i>number</i>
Tree	max-sessions
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Dynamic peer prefix for the group
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	<p>This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i>.</p> <p>All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].</p>
String format	'allowed-peer-as' must be 4-byte decimal AS number or AS..AS range
Max. instances	32
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-neighbor-limit *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> dynamic-neighbor-limit <i>number</i>
Tree	dynamic-neighbor-limit
Description	<p>This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.</p> <p>When unconfigured, the setting is inherited from the BGP global-level configuration.</p>
Range	1 to 8192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *boolean*

Synopsis	Enable default reject import policy for external peers
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Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-handling

Synopsis	Enter the error-handling context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> error-handling
Tree	error-handling
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	<p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, all errors trigger a session reset.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

evpn-link-bandwidth

Synopsis Enter the **evpn-link-bandwidth** context

Context **configure** [service vprn](#) *service-name* [bgp group](#) *named-item-64* [evpn-link-bandwidth](#)

Tree [evpn-link-bandwidth](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

add-to-received-bgp *number*

Synopsis Weight added to received PE-CE BGP routes

Context **configure** [service vprn](#) *service-name* [bgp group](#) *named-item-64* [evpn-link-bandwidth](#)
[add-to-received-bgp](#) *number*

Tree [add-to-received-bgp](#)

Description This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.

For the load-balancing between EVPN-IFL and BGP PE-CE routes the **configure service vprn bgp eibgp-loadbalance** command must already be configured in the system.

Range 1 to 128

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

export

Synopsis Enable the **export** context

Context **configure** [service vprn](#) *service-name* [bgp group](#) *named-item-64* [export](#)

Tree [export](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis Export policy name

Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> extended-nh-encoding
Tree	extended-nh-encoding
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> extended-nh-encoding ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family

Synopsis	Enable the family context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> family

Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-ipv6 *boolean*

Synopsis	Advertise support for the FlowSpec-IPv6 address family
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> family flow-ipv6 <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> family ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
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Context	configure service vprn <i>service-name</i> bgp group named-item-64 family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure service vprn <i>service-name</i> bgp group named-item-64 family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure service vprn <i>service-name</i> bgp group named-item-64 family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure service vprn <i>service-name</i> bgp group named-item-64 fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	<p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p>

When configured to **false**, the BGP session remains up until the hold time expires.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enable the **graceful-restart** context
Context **configure** [service vprn](#) *service-name* [bgp group named-item-64](#) [graceful-restart](#)
Tree [graceful-restart](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

gr-notification *boolean*

Synopsis Perform graceful restart procedures after NOTIFICATION
Context **configure** [service vprn](#) *service-name* [bgp group named-item-64](#) [graceful-restart gr-notification](#) *boolean*
Tree [gr-notification](#)
Description When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.
When configured to **false**, NOTIFICATION messages are not supported.
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

long-lived

Synopsis Enable the **long-lived** context
Context **configure** [service vprn](#) *service-name* [bgp group named-item-64](#) [graceful-restart long-lived](#)
Tree [long-lived](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Address family type for LLGR
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived family <i>keyword</i>
Tree	family

Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived helper-override-stale-time <i>number</i>

Tree	helper-override-stale-time
Description	<p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.</p>
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Description	<p>This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.</p> <p>When unconfigured, the command value is inherited from the BGP global-level setting.</p>
Range	0 3 to 65536
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
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Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> hold-time <i>seconds number</i>
Tree	seconds
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP global-level configuration.</p>
Range	0 3 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enable the import context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> import
Tree	import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15

Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> initial-send-delay-zero <i>boolean</i>
Tree	<i>initial-send-delay-zero</i>
Description	<p>When configured to true, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> keepalive <i>number</i>
Tree	<i>keepalive</i>
Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the hold-time seconds context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> • If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value. • If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval. • If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

	When unconfigured, the command inherits the BGP global-level setting.
Range	0 to 21845
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure service vprn <i>service-name</i> bgp group named-item-64 label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure service vprn <i>service-name</i> bgp group named-item-64 link-bandwidth
Tree	link-bandwidth
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-from-ebgp

Synopsis	Enter the accept-from-ebgp context
Context	configure service vprn <i>service-name</i> bgp group named-item-64 link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth accept-from-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-to-received-ebgp

Synopsis	Enter the add-to-received-ebgp context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aggregate-used-paths

Synopsis	Enter the aggregate-used-paths context
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Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth aggregate-used-paths label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-to-ebgp

Synopsis	Enter the send-to-ebgp context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-address (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> local-address (<i>ipv4-address-no-zone ipv6-address-no-zone interface-name</i>)
Tree	local-address
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-as

Synopsis	Enter the local-as context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> local-as
Tree	local-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> local-as prepend-global-as <i>boolean</i>

Tree	prepend-global-as
Description	<p>When configured to true, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.</p> <p>When configured to false, the global ASN is not included in the AS_PATH attribute.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> local-as private <i>boolean</i>
Tree	private
Description	<p>When configured to true, the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.</p> <p>When configured to false, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> loop-detect <i>keyword</i>
Tree	loop-detect

Options	drop-peer, ignore-loop, off, discard-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. range	0 to 4294967295
Options	igp-cost
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-route-advertisement *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multihop *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> next-hop-self <i>boolean</i>
Tree	next-hop-self
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

origin-validation

Synopsis	Enter the origin-validation context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> origin-validation
Tree	origin-validation
Description	Commands in this context configure the marking of every inbound IPv4, IPv6, and labeled IPv4 route from the BGP peer with one of the following origin validation states: <ul style="list-style-type: none">• Valid (0)

- Not-Found (1)
- Invalid (2)

The configurations apply to all types of VPRN BGP peers, but generally should be applied only to EBGp peers and groups that contain only EBGp peers.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4 *boolean*

Synopsis Enable support for unlabeled unicast IPv4 routes

Context **configure** [service vprn](#) *service-name* [bgp group](#) *named-item-64* [origin-validation](#) [ipv4 boolean](#)

Tree [ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 *boolean*

Synopsis Enable support for unlabeled unicast IPv6 routes

Context **configure** [service vprn](#) *service-name* [bgp group](#) *named-item-64* [origin-validation](#) [ipv6 boolean](#)

Tree [ipv6](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis Enable support for labeled-unicast IPv4 routes

Context **configure** [service vprn](#) *service-name* [bgp group](#) *named-item-64* [origin-validation](#) [label-ipv4 boolean](#)

Tree [label-ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

passive *boolean*

Synopsis	Enable passive mode for BGP communication
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-as *number*

Synopsis	Peer AS number
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> peer-as <i>number</i>
Tree	peer-as
Range	1 to 4294967295
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, peer tracking is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-limit [[family](#)] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family] keyword

Synopsis	Address family to which the limit applies
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-excess number

Synopsis	Percentage of maximum routes to install in route table
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> prefix-limit <i>keyword</i> hold-excess <i>number</i>
Tree	hold-excess
Description	<p>This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the post-import command is configured to true, only routes not rejected by import policies count toward the limit.</p> <p>A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.</p> <p>This command is mutually exclusive with the idle-timeout and log-only commands.</p>
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-timeout number

Synopsis	Time BGP peering remains idle before reconnecting
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> prefix-limit <i>keyword</i> idle-timeout <i>number</i>
Tree	idle-timeout
Description	This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.

When unconfigured, the BGP peer stays down until the operator performs a reset. This command and **log-only** cannot be configured simultaneously.

Range	1 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> <i>prefix-limit</i> keyword <i>log-only</i> <i>boolean</i>
Tree	<i>log-only</i>
Description	<p>When configured to true, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached.</p> <p>This command and idle-timeout cannot be configured simultaneously.</p> <p>When configured to false, the router generates a log event and takes the BGP session down upon reaching the prefix limit.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp group</i> <i>named-item-64</i> <i>prefix-limit</i> keyword <i>maximum</i> <i>number</i>
Tree	<i>maximum</i>
Description	<p>This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken.</p> <p>When log-only is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.</p>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Description	<p>When configured to true, the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit.</p> <p>When configured to false, the system limits the number of routes to all routes received from the peer.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-private

Synopsis	Enable the remove-private context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> remove-private
Tree	remove-private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-communities

Synopsis	Enter the send-communities context
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> send-communities
Tree	send-communities
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

extended *boolean*

Synopsis Advertise the Extended Communities attribute to peers

Context **configure** *service vprn* *service-name bgp group named-item-64* *send-communities extended boolean*

Tree *extended*

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute.

When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

large *boolean*

Synopsis Advertise the Large Communities attribute to peers

Context **configure** *service vprn* *service-name bgp group named-item-64* *send-communities large boolean*

Tree *large*

Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute.

When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

standard *boolean*

Synopsis Advertise the Communities attribute to peers

Context **configure** *service vprn* *service-name bgp group named-item-64* *send-communities standard boolean*

Tree *standard*

Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-default

Synopsis	Enable the send-default context
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> send-default
Tree	send-default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policy name
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	configure service vpn <i>service-name</i> bgp group <i>named-item-64</i> send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-group *boolean*

Synopsis	Use group for static peers
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> static-group <i>boolean</i>
Tree	static-group
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure <i>service vprn service-name</i> <i>bgp group named-item-64</i> tcp-mss (<i>number</i> <i>keyword</i>)
Tree	<i>tcp-mss</i>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure <i>service vprn service-name</i> <i>bgp group named-item-64</i> third-party-nexthop <i>boolean</i>
Tree	<i>third-party-nexthop</i>
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> ttl-security <i>number</i>
Tree	ttl-security
Description	This command configures the minimum TTL value that BGP accepst from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	BGP peer type
Context	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i> type <i>keyword</i>
Tree	type
Options	internal, external
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn <i>service-name</i> bgp hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure service vprn <i>service-name</i> bgp hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.

Range	0 3 to 65535
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>bgp</i> <i>hold-time</i> <i>seconds</i> <i>number</i>
Tree	<i>seconds</i>
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.
Range	0 3 to 65535
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>bgp</i> <i>ibgp-multipath</i> <i>boolean</i>
Tree	<i>ibgp-multipath</i>
Description	<p>When configured to true, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.</p> <p>When configured to false, this command disables IBGP multipath load balancing.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

import

Synopsis Enable the **import** context

Context **configure** [service vprn](#) *service-name* [bgp import](#)

Tree [import](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis Import policy name

Context **configure** [service vprn](#) *service-name* [bgp import policy](#) (*policy-expr-string* | *string*)

Tree [policy](#)

String length 1 to 255

String format 'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])

Max. instances 15

Min. instances 1

Notes This element is ordered by the user.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

initial-send-delay-zero *boolean*

Synopsis Send BGP updates as soon as session comes up

Context **configure** [service vprn](#) *service-name* [bgp initial-send-delay-zero](#) *boolean*

Tree [initial-send-delay-zero](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure service vprn <i>service-name</i> bgp keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure service vprn <i>service-name</i> bgp label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Default	170
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-as

Synopsis	Enter the local-as context
Context	configure service vprn <i>service-name</i> bgp local-as
Tree	local-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure service vprn <i>service-name</i> bgp local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

prepend-global-as *boolean*

Synopsis Prepend global AS when advertising routes to BGP peer

Context **configure** *service vpn* *service-name* *bgp local-as prepend-global-as boolean*

Tree [prepend-global-as](#)

Description When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.

When configured to **false**, the global ASN is hidden in paths announced to the EBGp peer.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

private *boolean*

Synopsis Hide the local ASN in sent paths learned from peering

Context **configure** *service vpn* *service-name* *bgp local-as private boolean*

Tree [private](#)

Description When configured to **true**, the local ASN is hidden in paths learned from the peering.

When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

local-preference *number*

Synopsis Default local preference if not in incoming routes

Context **configure** *service vpn* *service-name* *bgp local-preference number*

Tree [local-preference](#)

Max. range 0 to 4294967295

Default 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

loop-detect *keyword*

Synopsis Strategy for loop detection in the AS path

Context **configure** [service vprn](#) *service-name* [bgp loop-detect](#) *keyword*

Tree [loop-detect](#)

Options drop-peer, ignore-loop, off, discard-route

Default ignore-loop

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

loop-detect-threshold *number*

Synopsis Threshold for the global ASN in a received AS path

Context **configure** [service vprn](#) *service-name* [bgp loop-detect-threshold](#) *number*

Tree [loop-detect-threshold](#)

Range 0 to 15

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

med-out (*number* | *keyword*)

Synopsis Default MED attribute value to advertise to peers

Context **configure** [service vprn](#) *service-name* [bgp med-out](#) (*number* | *keyword*)

Tree [med-out](#)

Max. range 0 to 4294967295

Options igp-cost

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

min-route-advertisement *number*

Synopsis Minimum time before a prefix can be advertised to peer

Context	configure service vprn <i>service-name</i> bgp min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multihop *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure service vprn <i>service-name</i> bgp multihop <i>number</i>
Tree	multihop
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGp peer multiple hops away. This command applies only to EBGp.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipath

Synopsis	Enter the multipath context
Context	configure service vprn <i>service-name</i> bgp multipath
Tree	multipath
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Maximum multipaths per prefix for EBGp learned routes
Context	configure service vprn <i>service-name</i> bgp multipath ebgp <i>number</i>
Tree	ebgp
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>bgp multipath family keyword</i>
Tree	<i>family</i>
Description	<p>Commands in this context set ECMP multipath parameters that apply only to the specified label unicast address family.</p> <p>When multipath is enabled, traffic to the destination is load-shared across a set of paths (BGP routes) that the BGP decision process considers equal to the best path. The distribution of traffic over the multiple paths may or may not be equal. The distribution is based on weights derived from the Link Bandwidth Extended Community.</p> <p>For more information about the criteria a non-best route must meet to qualify as a multipath, see “BGP route installation in the route table” in the <i>7705 SAR Gen 2 Unicast Routing Protocols User Guide</i>.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] *keyword*

Synopsis	Address family type for the multipath selection
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>bgp multipath family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>bgp multipath family keyword ebgp number</i>
Tree	<i>ebgp</i>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	configure <i>service vprn service-name bgp multipath family keyword</i> ibgp <i>number</i>
Tree	ibgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-paths *number*

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	configure <i>service vprn service-name bgp multipath family keyword</i> max-paths <i>number</i>
Tree	max-paths
Description	<p>This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the family command.</p> <p>Consider the following when configuring this command:</p> <ul style="list-style-type: none">• If the best path is an EBGp-learned route and the ebgp command is configured, the limit configured in the ebgp command overrides the limit configured in this command.• If the best path is an IBGP-learned route and the ibgp command is configured, the limit configured in the ibgp command overrides the limit configured in this command.• If the best path is an EBGp-learned route and the ebgp command is not configured, and this command is configured to 1, multipaths are disabled.• If the best path is an IBGP-learned route and the ibgp command is not configured, and this command is configured to 1, multipaths are disabled.
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure service vprn <i>service-name</i> bgp multipath family <i>keyword</i> restrict <i>keyword</i>
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure service vprn <i>service-name</i> bgp multipath family <i>keyword</i> unequal-cost <i>boolean</i>
Tree	unequal-cost
Description	When configured to true , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	configure service vprn <i>service-name</i> bgp multipath ibgp <i>number</i>
Tree	ibgp
Range	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-paths *number*

Synopsis	Maximum multipaths per prefix
Context	configure service vprn <i>service-name</i> bgp multipath max-paths <i>number</i>

Tree	max-paths
Range	1 to 64
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure service vprn <i>service-name</i> bgp multipath restrict <i>keyword</i>
Tree	restrict
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure service vprn <i>service-name</i> bgp multipath unequal-cost <i>boolean</i>
Tree	unequal-cost
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the neighbor list instance
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
Description	Commands in this context configure a BGP peer or neighbor instance.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the BGP peer router
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	<p>When configured to true, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none">• If the active route for the IP prefix is a BGP route, that route is advertised.• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

advertise-ipv6-next-hops

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-ipv6-next-hops**

Tree [advertise-ipv6-next-hops](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4 *boolean*

Synopsis Enable IPv4 routes to be advertised

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-ipv6-next-hops** [ipv4](#) *boolean*

Tree [ipv4](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

aggregator-id-zero *boolean*

Synopsis Set router ID in the BGP AGGREGATOR attribute to zero

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **aggregator-id-zero** *boolean*

Tree [aggregator-id-zero](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	configure <i>service vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) as-override <i>boolean</i>
Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). This command cannot be explicitly configured to false.</p> <p>When the command inherits a value of false, no AS override is performed.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure <i>service vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	BGP authentication key
Context	configure <i>service vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the BGP authentication key peers in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [authentication-keychain](#) *reference*

Tree [authentication-keychain](#)

Description This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.

Reference **configure** [system security keychains](#) [keychain](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bfd

Synopsis Enable the **bfd** context

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [bfd](#)

Tree [bfd](#)

Description Commands in this context configure the BFD command options for the BGP neighbor.

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

multiplier *number*

Synopsis Multiplier for the BFD session

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [bfd](#) [multiplier](#) *number*

Tree [multiplier](#)

Description This command configures the number of consecutive BFD messages that must be missed from the peer before the BFD session state is changed to down and the upper level protocols (OSPF, IS-IS, BGP, or PIM) are notified of the fault.

Range 1 to 20

Default 3

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

receive-interval *number*

Synopsis Receive interval for the BFD session

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [bfd receive-interval](#) *number*

Tree [receive-interval](#)

Range 10 to 100000

Units milliseconds

Default 100

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

transmit-interval *number*

Synopsis Transmit interval for the BFD session

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [bfd transmit-interval](#) *number*

Tree [transmit-interval](#)

Range 10 to 100000

Units milliseconds

Default 100

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

type *keyword*

Synopsis Type of BFD session endpoint to use

Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [bfd type](#) *keyword*

Tree [type](#)

Options cpm-np – Processed by the network processor on the CPM
auto – System determines the appropriate session type
fp – Processed on the forwarding plane hardware

Default auto

Introduced	26.10.R1
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-strict-mode

Synopsis	Enter the bfd-strict-mode context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-strict-mode
Tree	bfd-strict-mode
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-strict-mode advertise
Tree	advertise
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none">• The inherited or configured value for the bfd-liveness command that applies to the peer is true.

- The interface associated with the peer has a valid BFD configuration.

When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.

When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

holdtime *number*

Synopsis Maximum time BGP waits for the BFD session to come up

Context **configure** *service* *vpn* *service-name* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **bfd-strict-mode advertise holdtime** *number*

Tree **holdtime**

Description This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.

Range 1 to 65535

Units seconds

Default 30

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

next-hop-reachability *boolean*

Synopsis Consider next hop unreachable if BFD session is down

Context **configure** *service* *vpn* *service-name* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **bfd-strict-mode next-hop-reachability** *boolean*

Tree **next-hop-reachability**

Description When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:

- The BFD session to the peer is in a down state.
- There is a valid interface BFD configuration that applies to the peer.
- There is a valid BFD liveness configuration that applies to the peer.

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer. The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	configure <i>service vpn</i> <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) capability-negotiation <i>boolean</i>
Tree	<i>capability-negotiation</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
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Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) client-reflect <i>boolean</i>
Tree	client-reflect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster

Synopsis	Enter the cluster context
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster
Tree	cluster
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cluster-id *ipv4-address*

Synopsis	Route reflector cluster ID
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster cluster-id <i>ipv4-address</i>
Tree	cluster-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations
Tree	damp-peer-oscillations
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time initial-wait <i>number</i>

Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damping <i>boolean</i>
Tree	damping

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference
Tree	default-label-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp number

Synopsis	Default preference for EBGp
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp number

Synopsis	Default preference for IBGP
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-preference

Synopsis	Enter the default-preference context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference

Tree	default-preference
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ibgp *number*

Synopsis	Default preference for IBGP
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Description	When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route

matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**).

This command does not flap an established session because it applies only to routes received after the command is issued.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, received routes are not checked for compliance with the rule.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

error-handling

Synopsis Enter the **error-handling** context
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **error-handling**
Tree [error-handling](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

update-fault-tolerance *boolean*

Synopsis Tolerate non-critical errors in UPDATE messages
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **error-handling** **update-fault-tolerance** *boolean*
Tree [update-fault-tolerance](#)
Description When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.
When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.
When this command inherits a value of **false**, all errors trigger a session reset.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

evpn-link-bandwidth

Synopsis	Enter the evpn-link-bandwidth context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-to-received-bgp *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) evpn-link-bandwidth add-to-received-bgp <i>number</i>
Tree	add-to-received-bgp
Description	<p>This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.</p> <p>For the load-balancing between EVPN-IFL and BGP PE-CE routes the configure service vprn bgp eibgp-loadbalance command must already be configured in the system.</p>
Range	1 to 128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Enable the export context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) export
Tree	export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Export policy name
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Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding
Tree	extended-nh-encoding
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Enable IPv4 family type
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family

Synopsis	Enable the family context
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Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-ipv6 *boolean*

Synopsis	Advertise support for the FlowSpec-IPv6 address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-ipv6 <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Add support for the IPv4 address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) fast-external-failover <i>boolean</i>
Tree	fast-external-failover

Description	<p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart
Tree	graceful-restart
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	<p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

long-lived

Synopsis	Enable the long-lived context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived

Tree	long-lived
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i>
Tree	family
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family-type] keyword

Synopsis	Address family type for LLGR
Context	configure service vprn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) graceful-restart long-lived family keyword
Tree	family
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertised-stale-time number

Synopsis	LLGR stale routes time for family override
Context	configure service vprn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) graceful-restart long-lived family keyword advertised-stale-time number
Tree	advertised-stale-time
Description	<p>This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.</p>
Range	0 to 16777215
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time number

Synopsis	Locally-configured stale routes override time
Context	configure service vprn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) graceful-restart long-lived family keyword helper-override-stale-time number
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.

Range	0 to 16777216
Default	16777216
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fw
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart restart-time <i>number</i>

Tree	restart-time
Range	0 to 4095
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *reference*

**WARNING:** Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Neighbor to group
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) group <i>reference</i>
Tree	group
Reference	configure service vprn <i>service-name</i> bgp group <i>named-item-64</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
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Context	configure service vprn service-name bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	configure service vprn service-name bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Range	0 3 to 65536
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Maximum hold time between successive messages
Context	configure service vprn service-name bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) hold-time seconds <i>number</i>
Tree	seconds
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP group-level configuration.</p>
Range	0 3 to 65535
Introduced	25.3.R2

Platforms7705 SAR Gen 2

import

SynopsisEnable the **import** context

Context**configure service vprn** *service-name* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **import**

Tree**import**

Introduced25.3.R2

Platforms7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

SynopsisRoute policy name

Context**configure service vprn** *service-name* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **import policy** (*policy-expr-string* | *string*)

Tree**policy**

String length1 to 255

String format'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])

Max. instances15

Min. instances1

NotesThis element is ordered by the user.

Introduced25.3.R2

Platforms7705 SAR Gen 2

initial-send-delay-zero *boolean*

SynopsisSend BGP updates as soon as the session comes up

Context**configure service vprn** *service-name* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **initial-send-delay-zero** *boolean*

Tree**initial-send-delay-zero**

DescriptionWhen configured to **true**, BGP updates are sent as soon as the session comes up.
When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

keepalive *number*

Synopsis Time after which the BGP KEEPALIVE message is sent
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [keepalive](#) *number*
Tree [keepalive](#)
Range 0 to 21845
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

label-preference *number*

Synopsis Route preference for routes from labeled-unicast peers
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [label-preference](#) *number*
Tree [label-preference](#)
Range 1 to 255
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

link-bandwidth

Synopsis Enter the **link-bandwidth** context
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [link-bandwidth](#)
Tree [link-bandwidth](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

accept-from-ebgp

Synopsis Enable the **accept-from-ebgp** context

Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp label-ipv4 boolean
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

add-to-received-ebgp

Synopsis	Enable the add-to-received-ebgp context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv4 boolean
Tree	label-ipv4
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

aggregate-used-paths

Synopsis Enable the **aggregate-used-paths** context
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [link-bandwidth](#) [aggregate-used-paths](#)
Tree [aggregate-used-paths](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv4 boolean

Synopsis Support Link Bandwidth EC in IPv4 routes
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [link-bandwidth](#) [aggregate-used-paths](#) [ipv4](#) *boolean*
Tree [ipv4](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ipv6 boolean

Synopsis Support Link Bandwidth EC in IPv6 routes
Context **configure** [service vprn](#) *service-name* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [link-bandwidth](#) [aggregate-used-paths](#) [ipv6](#) *boolean*
Tree [ipv6](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

label-ipv4 boolean

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-to-ebgp

Synopsis	Enable the send-to-ebgp context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>interface-name</i>)
Tree	local-address
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-as

Synopsis	Enter the local-as context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as
Tree	local-as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. range	0 to 4294967295
Options	igp-cost
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multihop *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multipath-eligible *boolean*

Synopsis	Allow routes from this peer in multipath eligibility
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-self <i>boolean</i>
Tree	next-hop-self
Description	When configured to true , this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.

Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the **configure router bgp rr-vpn-forwarding** command should also be configured.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, protocol standard behavior is applied to determine whether to set **next-hop-self** in advertised routes.

Introduced25.3.R2

Platforms7705 SAR Gen 2

origin-validation

SynopsisEnable the **origin-validation** context

Context**configure service vpn service-name bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) origin-validation**

Tree**origin-validation**

Description

Commands in this context configure the marking of every inbound IPv4, IPv6, and labeled IPv4 route from the BGP peer with one of the following origin validation states:

- Valid (0)
- Not-Found (1)
- Invalid (2)

The configurations apply to all types of VPRN BGP peers, but generally should be applied only to EBGp peers and groups that contain only EBGp peers.

Introduced25.3.R2

Platforms7705 SAR Gen 2

ipv4 boolean

SynopsisEnable support for unlabeled unicast IPv4 routes

Context**configure service vpn service-name bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) origin-validation ipv4 boolean**

Tree**ipv4**

Defaultfalse

Introduced25.3.R2

Platforms7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Use passive mode for BGP communication
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) passive <i>boolean</i>
Tree	passive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis	Enable path MTU discovery
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	When configured to true , Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-as *number*

Synopsis	Peer AS number
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-as <i>number</i>
Tree	peer-as
Description	<p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-creation-type *keyword*

Synopsis	Peer creation type
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-creation-type <i>keyword</i>
Tree	peer-creation-type
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Default	static
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure <i>service vpn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) peer-ip-tracking boolean</i>
Tree	peer-ip-tracking
Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, peer tracking is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure <i>service vpn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) preference number</i>
Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p> <p>When unconfigured, the command setting is inherited from the group-level configuration.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-limit [[family](#)] *keyword*

Synopsis	Enter the prefix-limit list instance
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Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[family] keyword

Synopsis	Address family to which the limit applies
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-excess number

Synopsis	Percentage of maximum routes to install in route table
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> hold-excess <i>number</i>
Tree	hold-excess
Description	<p>This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the post-import command is configured to true, only routes not rejected by import policies count toward the limit.</p> <p>A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.</p> <p>This command is mutually exclusive with the idle-timeout and log-only commands.</p>
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-timeout *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword idle-timeout <i>number</i>
Tree	idle-timeout
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer. When unconfigured, the command inherits the value from the group-level configuration.
Range	1 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure service vpn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit keyword maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-private

Synopsis	Enable the remove-private context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private
Tree	remove-private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private limited <i>boolean</i>
Tree	limited

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-communities

Synopsis	Enter the send-communities context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities
Tree	send-communities
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
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Context	configure service vprn service-name bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure service vprn service-name bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) send-communities large <i>boolean</i>
Tree	large
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure service vprn service-name bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) send-communities standard <i>boolean</i>
Tree	standard
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-default

Synopsis	Enable the send-default context
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default
Tree	send-default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policy name
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable IPv6 family type
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Context	configure service vprn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure service vprn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure service vprn service-name bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p>

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

Range	384 to 9746
Options	ip-stack
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ttl-security <i>number</i>
Tree	ttl-security
Description	<p>This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.</p> <p>When unconfigured, the command inherits the value of the group-level setting.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	BGP peer type
Context	configure service vprn <i>service-name</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) type <i>keyword</i>
Tree	type

Options	internal, external
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop-resolution

Synopsis	Enter the next-hop-resolution context
Context	configure service vprn <i>service-name</i> bgp next-hop-resolution
Tree	next-hop-resolution
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	configure service vprn <i>service-name</i> bgp next-hop-resolution policy reference
Tree	policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-bgp-routes *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	configure service vprn <i>service-name</i> bgp next-hop-resolution use-bgp-routes <i>boolean</i>
Tree	use-bgp-routes
Description	<p>When configured to true, BGP routes resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p> <p>When configured to false, BGP next hops are not resolved.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

use-leaked-routes

Synopsis Enter the **use-leaked-routes** context

Context **configure** [service vprn](#) *service-name* [bgp next-hop-resolution use-leaked-routes](#)

Tree [use-leaked-routes](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

static *boolean*

Synopsis Use leaked static routes to resolve BGP next hop

Context **configure** [service vprn](#) *service-name* [bgp next-hop-resolution use-leaked-routes static](#) *boolean*

Tree [static](#)

Description When configured to **true**, the router allows any non-leaked unlabeled unicast IPv4 or IPv6 route in the BGP RIB to be resolved by a leaked static route with direct next hops. A BGP route resolved this way cannot resolve other routes (including BGP routes) and cannot be redistributed into non-BGP protocols, such as IGP.

When configured to **false**, the router prevents the use of leaked static routes to resolve BGP routes.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

path-mtu-discovery *boolean*

Synopsis Enable Path MTU Discovery

Context **configure** [service vprn](#) *service-name* [bgp path-mtu-discovery](#) *boolean*

Tree [path-mtu-discovery](#)

Description When configured to **true**, Path MTU Discovery (PMTUD) is activated toward an IPv4 BGP neighbor. The Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, the device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value to accommodate the IP MTU constraint.

When configured to **false**, PMTUD is disabled and there is no TCP MSS configuration to associate with a BGP neighbor (in either the BGP configuration or the first-hop IP interface configuration). The router advertises a TCP MSS option of only 1024 bytes, limiting the received TCP segments to that size.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure service vprn <i>service-name</i> bgp peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer-tracking-policy *reference*

Synopsis	Policy for BGP peer tracking on router instance
Context	configure service vprn <i>service-name</i> bgp peer-tracking-policy <i>reference</i>
Tree	peer-tracking-policy
Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure service vprn <i>service-name</i> bgp preference <i>number</i>

Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p>
Range	1 to 255
Default	170
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rapid-update

Synopsis	Enter the rapid-update context
Context	configure service vprn <i>service-name</i> bgp rapid-update
Tree	rapid-update
Description	<p>Commands in this context specify the address families that are configured to support the rapid update functionality.</p> <p>The rapid update functionality overrides the remaining time on a peer's MRAT timer and immediately sends routes belonging to the specified address families (and all other pending updates) to the peers receiving these routes.</p>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ipv4 boolean

Synopsis	Include IPv4 address family routes
Context	configure service vprn <i>service-name</i> bgp rapid-update ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

ipv6 boolean

Synopsis	Include IPv6 address family routes
Context	configure service vprn <i>service-name</i> bgp rapid-update ipv6 <i>boolean</i>

Tree	ipv6
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

rapid-withdrawal *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	configure service vprn <i>service-name</i> bgp rapid-withdrawal <i>boolean</i>
Tree	rapid-withdrawal
Description	<p>When configured to true, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.</p> <p>When configured to false, withdrawal processing continues with the normal behavior.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remove-private

Synopsis	Enable the remove-private context
Context	configure service vprn <i>service-name</i> bgp remove-private
Tree	remove-private
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure service vprn <i>service-name</i> bgp remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp remove-private</i> replace <i>boolean</i>
Tree	<i>replace</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp remove-private</i> skip-peer-as <i>boolean</i>
Tree	<i>skip-peer-as</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-management

Synopsis	Enter the rib-management context
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp</i> rib-management
Tree	<i>rib-management</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp rib-management</i> ipv4
Tree	<i>ipv4</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure service vpn <i>service-name</i> bgp rib-management ipv4 leak-import
Tree	leak-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vpn <i>service-name</i> bgp rib-management ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies one or more leak import policies.</p> <p>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-import

Synopsis	Enter the route-table-import context
Context	configure service vpn <i>service-name</i> bgp rib-management ipv4 route-table-import
Tree	route-table-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure service vprn <i>service-name</i> bgp rib-management ipv4 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>service-name</i> bgp rib-management ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure service vprn <i>service-name</i> bgp rib-management ipv6 leak-import
Tree	leak-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vprn <i>service-name</i> bgp rib-management ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-import

Synopsis	Enter the route-table-import context
Context	configure service vprn <i>service-name</i> bgp rib-management ipv6 route-table-import
Tree	route-table-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure service vprn <i>service-name</i> bgp rib-management ipv6 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs. When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in

that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure service vpn <i>service-name</i> bgp rib-management label-ipv4
Tree	label-ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure service vpn <i>service-name</i> bgp rib-management label-ipv4 leak-import
Tree	leak-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vpn <i>service-name</i> bgp rib-management label-ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies.

Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-table-import

Synopsis	Enter the route-table-import context
Context	configure service vprn <i>service-name</i> bgp rib-management label-ipv4 route-table-import
Tree	route-table-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure service vprn <i>service-name</i> bgp rib-management label-ipv4 route-table-import policy-name <i>reference</i>
Tree	policy-name

Description This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.

When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure service vpn <i>service-name</i> bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

leak-import

Synopsis	Enter the leak-import context
Context	configure service vpn <i>service-name</i> bgp rib-management label-ipv6 leak-import
Tree	leak-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure service vpn <i>service-name</i> bgp rib-management label-ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies one or more leak import policies.</p> <p>Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Notes	This element is ordered by the user.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *ipv4-address*

Synopsis	Router ID for the BGP instance in the AS
Context	configure service vprn <i>service-name</i> bgp router-id <i>ipv4-address</i>
Tree	router-id
Description	<p>This command specifies the router ID to be used with the BGP instance.</p> <p>Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.</p> <p>When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.</p>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-communities

Synopsis	Enter the send-communities context
Context	configure service vprn <i>service-name</i> bgp send-communities
Tree	send-communities
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure service vprn <i>service-name</i> bgp send-communities extended <i>boolean</i>
Tree	extended
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure service vprn <i>service-name</i> bgp send-communities large <i>boolean</i>
Tree	large
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure service vprn <i>service-name</i> bgp send-communities standard <i>boolean</i>
Tree	standard
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-default

Synopsis	Enter the send-default context
Context	configure service vprn <i>service-name</i> bgp send-default
Tree	send-default
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policy name
Context	configure service vprn <i>service-name</i> bgp send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure service vpn <i>service-name</i> bgp send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure service vpn <i>service-name</i> bgp send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure service vpn <i>service-name</i> bgp split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to false, the use of split-horizon is disabled.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size override
Context	configure <i>service vprn service-name</i> bgp tcp-mss <i>number</i>
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure <i>service vprn service-name</i> bgp third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn

Synopsis	Enter the bgp-evpn context
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Context	configure service vprn <i>service-name</i> bgp-evpn
Tree	bgp-evpn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls [[bgp-instance](#)] *number*

Synopsis	Enter the mpls list instance
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i>
Tree	mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[bgp-instance] *number*

Synopsis	BGP instance ID
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i>
Tree	mpls
Range	1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP-EVPN MPLS
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-bind-tunnel

Synopsis	Enter the auto-bind-tunnel context
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure the automatic binding options of a BGP-EVPN service using tunnels to MP-BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum ECMP routes allowed
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel ecmp <i>number</i>
Tree	ecmp
Description	This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the configure service vprn context level.
Range	1 to 32
Default	1

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-strict-tunnel-tagging *boolean*

Synopsis	Allow enforcement of strict tunnel tagging
Context	configure <i>service vprn service-name bgp-evpn mpls number auto-bind-tunnel enforce-strict-tunnel-tagging boolean</i>
Tree	<i>enforce-strict-tunnel-tagging</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-untagged-route *keyword*

Synopsis	Untagged route type enforcement
Context	configure <i>service vprn service-name bgp-evpn mpls number auto-bind-tunnel enforce-untagged-route keyword</i>
Tree	<i>enforce-untagged-route</i>
Description	<p>This command configures the enforcement of BGP routes with no administrative tag policy applied by modifying the next-hop resolution behavior for autobind services.</p> <p>If the untagged-tunnel option is configured, untagged routes only bind to LSPs with no administrative tag configured. If both tagged and untagged tunnels to the next hop exist, the system only considers the untagged tunnels. If no untagged tunnels to the next hop exist, the resolution of untagged routes fails.</p> <p>The untagged-tunnel option can be used in combination with the enforce-strict-tunnel-tagging command configured to true, in which case tagged routes resolve to tagged LSPs, and untagged routes only resolve to untagged LSPs.</p> <p>When unconfigured, untagged routes can bind to tagged or untagged LSPs.</p>
Options	none – Untagged routes can bind to tagged or untagged LSPs untagged-tunnel – Untagged routes only bind to LSPs without an admin tag
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution *keyword*

Synopsis	Resolution method for tunnel selection
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Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution <i>keyword</i>
Tree	resolution
Options	none, filter, any
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
Tree	resolution-filter
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-EVPN routes within the automatic binding of the BGP-EVPN MPLS service to tunnels to MP-BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , BGP searches the BGP LSP for the address of the BGP next hop. When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
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Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to false , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Description	When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to false , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	When configured to true , BGP uses an IS-IS tunnel type to resolve the BGP next hop. When the sr-isis command is enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure. <ul style="list-style-type: none"> • Select the SR tunnel submitted by the IS-IS instance with the lowest tunnel table preference.

- If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.
- If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID.

When configured to **false**, IS-IS tunneling is not used for next-hop resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf <i>boolean</i>
Tree	sr-ospf
Description	<p>When configured to true, BGP uses an OSPF tunnel type to resolve the BGP next hop.</p> <p>When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none"> • Select the SR tunnel submitted by the OSPF instance with the lowest tunnel table preference. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Description	<p>When configured to true, BGP uses an OSPF3 tunnel type to resolve the BGP next hop.</p> <p>When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p>

- Select the SR tunnel submitted by the OSPFv3 instance with the lowest tunnel table preference.
- If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.
- If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID.

When configured to **false**, OSPF3 tunneling is not used for next-hop resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of SR policies to resolve the next hop of BGP-EVPN service routes.</p> <p>This command configures BGP to search for an SR policy with:</p> <ul style="list-style-type: none"> • a non-null endpoint that matches the next hop of the service route, and • a color value that matches the highest numbered color for the extended community attached to the service route
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	<p>When configured to true, BGP uses an SR-TE tunnel type to resolve the BGP next hop.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, SR-TE tunneling is not used for next-hop resolution.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter udp <i>boolean</i>
Tree	udp
Description	When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to false , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

default-route-tag *one-byte-value*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> default-route-tag <i>one-byte-value</i>
Tree	default-route-tag
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-id *domain-id***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> domain-id <i>domain-id</i>
Tree	<i>domain-id</i>
Description	<p>This command specifies the D-PATH domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as <i>domain-id:isf_safi_type</i> in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>
String format	'domain-id' must be global-field:local-field (uint32:uint16 range)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	configure <i>service vprn</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> dynamic-egress-label-limit <i>boolean</i>
Tree	<i>dynamic-egress-label-limit</i>
Description	When configured to true , this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.

For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN instance ID
Context	configure service vpn service-name bgp-evpn mpls number evi number
Tree	evi
Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-link-bandwidth

Synopsis	Enter the evpn-link-bandwidth context
Context	configure service vpn service-name bgp-evpn mpls number evpn-link-bandwidth
Tree	evpn-link-bandwidth
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise

Synopsis	Enable the advertise context
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> evpn-link-bandwidth advertise
Tree	advertise
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-dynamic-weight *number*

Synopsis	Maximum dynamic weight of the route
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> evpn-link-bandwidth advertise max-dynamic-weight <i>number</i>
Tree	max-dynamic-weight
Description	This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If weight dynamic is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
Range	1 to 128
Default	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight (*number* | *keyword*)

Synopsis	Weight of the route
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> evpn-link-bandwidth advertise weight (<i>number</i> <i>keyword</i>)
Tree	weight
Description	This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If set to dynamic , the weight is dynamically set based on the number of BGP PE-CE paths for the IP-Prefix that is advertised in an EVPN IP-Prefix route.
Range	1 to 128
Options	dynamic
Default	dynamic

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Enable weighted ECMP
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> evpn-link-bandwidth weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.</p> <p>Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).</p> <p>The command also enables the weighted ECMP functionality for BGP CEs that are configured with an evpn-link-bandwidth add-to-received-bgp weight.</p> <p>When configured to false, the router disables the processing of the EVPN link bandwidth extended community.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gateway-ip

Synopsis	Enter the gateway-ip context
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> gateway-ip
Tree	gateway-ip
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

advertise *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the advertisement of GW-IP in IP prefix routes
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>gateway-ip</i> <i>advertise</i> <i>boolean</i>
Tree	<i>advertise</i>
Description	<p>When configured to true, the router advertises an IP prefix route for prefix P with the next hop N in the GW-IP field when a BGP PE-CE route for P is received from N. If multiple CEs advertise the same prefix P from different next hops, and the configure router bgp add-paths evpn command is enabled on the Base router, the router generates multiple IP prefix routes. Each of these routes has a unique next hop encoded in the GW-IP field and a distinct path ID.</p> <p>When configured to false, IP prefix routes are advertised without a non-zero GW-IP value.</p>
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

resolve *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the resolution of GW-IP in IP prefix routes
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>gateway-ip</i> <i>resolve</i> <i>boolean</i>
Tree	<i>resolve</i>
Description	<p>When configured to true, the router resolves IP prefix routes with a non-zero GW-IP to either EVPN-IFL-HOST routes that match the GW-IP or to local R-VPLS interfaces if the GW-IP is associated with a local R-VPLS interface.</p> <p>When configured to false, IP prefix routes with a non-zero GW-IP remain unresolved.</p>
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

route-distinguisher (*string* | *keyword*)

Synopsis	Route distinguisher
Context	configure <i>service vpn</i> <i>service-name</i> <i>bgp-evpn mpls</i> <i>number</i> <i>route-distinguisher</i> (<i>string</i> <i>keyword</i>)

Tree	route-distinguisher
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
String format	'vprn-bgp-evpn-mpls-rd' must be IP:comm or AS-number pair per RD rules
Options	auto-rd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-tunnel-encap

Synopsis	Enter the send-tunnel-encap context
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> send-tunnel-encap
Tree	send-tunnel-encap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> send-tunnel-encap mpls <i>boolean</i>
Tree	mpls
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
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Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> send-tunnel-encap mpls-over-udp <i>boolean</i>
Tree	mpls-over-udp
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

static-service-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Static MPLS service label for this VPRN instance
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> static-service-label <i>number</i>
Tree	static-service-label
Description	<p>This command configures the static per-VRF MPLS service label for the VPRN instance. All routes advertised from this instance use the specified label instead of a dynamically allocated per-VRF label. Traffic received with the configured label is associated with this VPRN service instance. The static service label allows two or more PEs to advertise the same label and to be reached using a shared anycast address or SID.</p> <p>The specified label value must come from the static label range.</p> <p>Note: If a user configures the static label, the same label is used for that service regardless of any ressignaling or reboots.</p>
Range	32 to 1048575
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

vrf-export

Synopsis	Enable the vrf-export context
Context	configure service vprn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-export
Tree	vrf-export
Description	<p>Commands in this context specify route policies that control how routes are exported from the local VRF to other VRFs on the same or remote PE routers (via MP-BGP). Aggregate routes are not advertised via MP-BGP protocols to other MP-BGP peers. Route policies are configured in the configure policy-options context.</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-import

Synopsis	Enable the vrf-import context
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-import
Tree	vrf-import
Description	Commands in this context specify route policies that control how VPN-IP and EVPN-IFL routes that are exported by other VRFs on the same or remote PEs, are imported into the local VRF.

Route policies are configured in the **configure policy-options** context.

Unless the preference value is changed by the policy, the preference value for BGP-VPN and EVPN-IFL routes specified in this context is set to 170 when imported from remote PE routers, or the value is retained from the protocol preference value of the exported route when imported from other VRFs on the same router.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-target

Synopsis	Enter the vrf-target context
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Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-target
Tree	vrf-target
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *route-target*

Synopsis	Extended BGP community
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-target community <i>route-target</i>
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-community *route-target*

Synopsis	Communities sent to remote PE neighbors
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-target export-community <i>route-target</i>
Tree	export-community
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules

Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-community *route-target*

Synopsis	Communities accepted from remote PE neighbors
Context	configure service vpn <i>service-name</i> bgp-evpn mpls <i>number</i> vrf-target import-community <i>route-target</i>
Tree	import-community
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-ipvpn

Synopsis	Enter the bgp-ipvpn context
Context	configure service vpn <i>service-name</i> bgp-ipvpn
Tree	bgp-ipvpn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

attribute-set

Synopsis	Enter the attribute-set context
Context	configure service vpn <i>service-name</i> bgp-ipvpn attribute-set
Tree	attribute-set
Description	<p>Commands in this context configure the handling of attribute set (ATTR_SET) attributes attached to VPN-IP routes imported into or exported from the VPRN.</p> <p>ATTR_SET is an optional transitive BGP path attribute standardized by RFC 6368 that is added to BGP L3 VPN routes to provide logical separation between the BGP domain of a customer and the BGP domain of a service provider.</p>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export *boolean*

Synopsis	Add ATTR_SET path attribute to exported VPN-IP routes
Context	configure <i>service vprn service-name</i> <i>bgp-ipvpn attribute-set export</i> <i>boolean</i>
Tree	<i>export</i>
Description	<p>When configured to true, the router adds an ATTR_SET path attribute to all VPN-IP routes that come from the VRF export of BGP routes advertised by PE-CE peers of the VPRN. This attribute contains an exact copy of all BGP path attributes (post-import policy) of the PE-CE BGP route, excluding the NEXT_HOP, MP_REACH, and MP_UNREACH attributes, as well as the AS4_PATH or AS4_AGGREGATOR attributes. The origin AS in the ATTR_SET encodes the ASN (or confederation ID, if configured) of the exporting VPRN service. Neither the VRF export policy nor a regular BGP export policy is allowed to modify the contents of the ATTR_SET.</p> <p>When configured to false, the router does not add an ATTR_SET path attribute to VPN-IP routes exported by the VPRN. Nokia recommends configuring this command to false, unless there is a requirement for the VPRN to deliver an independent domain L3 VPN service.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import *keyword*

Synopsis	Reception behavior of ATTR_SET
Context	configure <i>service vprn service-name</i> <i>bgp-ipvpn attribute-set import</i> <i>keyword</i>
Tree	<i>import</i>
Description	<p>This command configures the reception behavior for ATTR_SETs in received VPN-IP routes.</p> <ul style="list-style-type: none">• accept — BGP accepts and processes ATTR_SETs in received unicast VPN-IP routes (MPLS or SRv6) when they are imported into the VPRN. The path attributes contained inside the ATTR_SET are used for best path selection within the VPRN, instead of the outer path attributes attached to the imported VPN-IP route. The path attributes inside the ATTR_SET determine the path attributes of BGP routes advertised to PE-CE peers of the VPRN. However, the ATTR_SET is removed at the time of advertisement. VPRN BGP routes with attributes derived from accept processing can only be advertised to EBGP peers and IBGP route reflector client peers. VPRN BGP routes cannot be advertised to BGP confederation peers. If the origin AS in the ATTR_SET attribute does not match the configured ASN, VPRN

BGP routes with attributes derived from **accept** processing are advertised to IBGP peers that are not covered by a cluster configuration.

- **drop** — BGP ignores and silently discards ATTR_SETs in received VPN-IP routes when they are imported into the VPRN. The path attributes contained inside the ATTR_SET are not used for best path selection within the VPRN. If a VPRN is not involved in an independent domain L3 VPN service, Nokia recommends configuring this command to use the **drop** option.
- **ignore** — BGP ignores ATTR_SETs in received VPN-IP routes when they are imported into the VPRN. The path attributes contained inside the ATTR_SET are not used for best path selection within the VPRN. With the **ignore** option, the ATTR_SET attribute is transmitted unchanged to the CE. Nokia recommends not to configure this command to use the **ignore** option in most deployments.

Options	ignore, accept, drop
Default	ignore
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls

Synopsis	Enter the mpls context
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls
Tree	mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BGP-IPVPN MPLS
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-bind-tunnel

Synopsis	Enter the auto-bind-tunnel context
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Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel
Tree	auto-bind-tunnel
Description	Commands in this context configure the automatic-binding options of a BGP-IPVPN service using tunnels to MP-BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum ECMP routes allowed
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel ecmp <i>number</i>
Tree	ecmp
Description	This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the configure service vprn context level.
Range	1 to 32
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-strict-tunnel-tagging *boolean*

Synopsis	Allow enforcement of strict tunnel tagging
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Description	<p>When configured to true, the system must only consider LSPs marked with an administrative tag for next-hop resolution.</p> <p>When configured to false, tagged RSVP and SR-TE LSPs are considered first. The system then uses untagged LSPs of other types.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-untagged-route *keyword*

Synopsis	Untagged route type enforcement
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel enforce-untagged-route <i>keyword</i>
Tree	enforce-untagged-route
Description	<p>This command configures the enforcement of BGP routes with no administrative tag policy applied by modifying the next-hop resolution behavior for autobind services.</p> <p>If the untagged-tunnel option is configured, untagged routes only bind to LSPs with no administrative tag configured. If both tagged and untagged tunnels to the next hop exist, the system only considers the untagged tunnels. If no untagged tunnels to the next hop exist, the resolution of untagged routes fails.</p> <p>The untagged-tunnel option can be used in combination with the enforce-strict-tunnel-tagging command configured to true, in which case tagged routes resolve to tagged LSPs, and untagged routes only resolve to untagged LSPs.</p> <p>When unconfigured, untagged routes can bind to tagged or untagged LSPs.</p>
Options	none – Untagged routes can bind to tagged or untagged LSPs untagged-tunnel – Untagged routes only bind to LSPs without an admin tag
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution keyword

Synopsis	Resolution method for tunnel selection
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution keyword
Tree	resolution
Options	none, filter, any
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter resolution-filter
Tree	resolution-filter
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-IPVPN routes within the automatic binding of the BGP-IPVPN MPLS service to tunnels to MP-BGP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp boolean

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter bgp boolean
Tree	bgp
Description	<p>When configured to true, BGP searches the BGP LSP for the address of the BGP next hop.</p> <p>When configured to false, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gre boolean

Synopsis	Use GRE tunneling for next-hop resolution
Context	configure service vprn service-name bgp-ipvpn mpls auto-bind-tunnel resolution-filter gre boolean
Tree	gre
Description	When configured to true , this command enables setting the tunnel type for the auto bind tunnel.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure service vprn service-name bgp-ipvpn mpls auto-bind-tunnel resolution-filter ldp boolean
Tree	ldp
Description	When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to false , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure service vprn service-name bgp-ipvpn mpls auto-bind-tunnel resolution-filter rsvp boolean
Tree	rsvp
Description	When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID. When configured to false , the RSVP LSP is not used for next-hop resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	<p>When configured to true, BGP uses an IS-IS tunnel type to resolve the BGP next hop.</p> <p>When the sr-isis command is enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none">• Select the SR tunnel submitted by the IS-IS instance with the lowest tunnel table preference.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf <i>boolean</i>
Tree	sr-ospf
Description	<p>When configured to true, BGP uses an OSPF tunnel type to resolve the BGP next hop.</p> <p>When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none">• Select the SR tunnel submitted by the OSPF instance with the lowest tunnel table preference.• If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric.

- If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID.

When configured to **false**, OSPF tunneling is not used for next-hop resolution.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Description	<p>When configured to true, BGP uses an OSPF3 tunnel type to resolve the BGP next hop. When enabled, an SR tunnel to the BGP next hop is selected in the TTM according to the following procedure.</p> <ul style="list-style-type: none"> • Select the SR tunnel submitted by the OSPFv3 instance with the lowest tunnel table preference. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest metric. • If more than one SR tunnel exists, select the SR tunnel from the instance with the lowest instance ID. <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of SR policies to resolve the next hop of BGP IP-VPN service routes.</p> <p>This command configures BGP to search for an SR policy with:</p> <ul style="list-style-type: none"> • a non-null endpoint that matches the next hop of the service route, and

- a color value that matches the highest numbered color for the extended community attached to the service route

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	<p>When configured to true, BGP uses an SR-TE tunnel type to resolve the BGP next hop.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, SR-TE tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-blackhole-first *boolean*

Synopsis	Check for static blackhole route to resolve next hop
Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls auto-bind-tunnel static-blackhole-first <i>boolean</i>
Tree	static-blackhole-first
Description	<p>When configured to true, the router uses a modified next-hop resolution sequence for each imported VPN-IP route. The router first checks for a static route in the Base routing table that matches the BGP next-hop address. If at least one such static route exists, and the route that is the longest match of the BGP next-hop address is a blackhole static route, the router resolves the VPN-IP route and programs it into the VPRN IP FIB table with a next-hop action that discards all matching packets. If there is no matching static route, or the longest matching static route is not a blackhole, the router resolves the VPN-IP route in the Base routing table as normal, that is, according to the configured VPRN auto-bind filter options.</p> <p>When configured to false, the router resolves the VPN-IP route in the Base routing table according to the configured VPRN auto-bind filter options.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

weighted-ecmp *boolean*

Synopsis	Allow weighted load-balancing
Context	configure <i>service vprn service-name bgp-ipvpn mpls auto-bind-tunnel weighted-ecmp boolean</i>
Tree	<i>weighted-ecmp</i>
Description	<p>When configured to true, this command enables weighted ECMP for packets using tunnels that a VPRN automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.</p> <p>When configured to false, this command disables weighted ECMP for next-hop tunnel selection.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-id *domain-id*

Synopsis	Domain ID of received BGP route before readvertisement
Context	configure <i>service vprn service-name bgp-ipvpn mpls domain-id domain-id</i>
Tree	<i>domain-id</i>
Description	<p>This command specifies the D-PATH domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p>

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

String format 'domain-id' must be global-field:local-field (uint32:uint16 range)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

dynamic-egress-label-limit *boolean*

Synopsis Enables dynamic egress label limit

Context **configure** *service vpn service-name* *bgp-ipvpn mpls dynamic-egress-label-limit boolean*

Tree *dynamic-egress-label-limit*

Description When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.

For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

route-distinguisher (*string* | *keyword*)

Synopsis Route distinguisher

Context **configure** *service vpn service-name* *bgp-ipvpn mpls route-distinguisher (string | keyword)*

Tree *route-distinguisher*

Description This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.

String format 'vpn-bgp-evpn-mpls-rd' must be IP:comm or AS-number pair per RD rules

Options auto-rd

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

static-service-label *number*

Synopsis	Static MPLS service label for this VPRN instance
Context	configure <i>service vprn service-name</i> <i>bgp-ipvpn mpls static-service-label number</i>
Tree	<i>static-service-label</i>
Description	<p>This command configures the static per-VRF MPLS service label for the VPRN instance. All routes advertised from this instance use the specified label instead of a dynamically allocated per-VRF label. Traffic received with the configured label is associated with this VPRN service instance. The static service label allows two or more PEs to advertise the same label and to be reached using a shared anycast address or SID.</p> <p>The specified label value must come from the static label range.</p> <p>Note: If a user configures the static label, the same label is used for that service regardless of any resignaling or reboots.</p>
Range	32 to 1048575
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

vrf-export

Synopsis	Enable the vrf-export context
Context	configure <i>service vprn service-name</i> <i>bgp-ipvpn mpls vrf-export</i>
Tree	<i>vrf-export</i>
Description	<p>Commands in this context specify route policies that control how routes are exported from the local VRF to other VRFs on the same or remote PE routers (via MP-BGP). Aggregate routes are not advertised via MP-BGP protocols to other MP-BGP peers. Route policies are configured in the configure policy-options context.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	configure <i>service vprn service-name</i> <i>bgp-ipvpn mpls vrf-export policy</i> (<i>policy-expr-string</i> <i>string</i>)
Tree	<i>policy</i>
Description	This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).

Each referenced object is either a policy logical expression or the name of a single policy.

Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.

Only the first policy can have the maximum length and the rest can be up to 64 characters.

Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-import

Synopsis	Enable the vrf-import context
Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls vrf-import
Tree	vrf-import
Description	<p>Commands in this context specify route policies that control how VPN-IP and EVPN-IFL routes that are exported by other VRFs on the same or remote PEs, are imported into the local VRF.</p> <p>Route policies are configured in the configure policy-options context.</p> <p>Unless the preference value is changed by the policy, the preference value for BGP-VPN and EVPN-IFL routes specified in this context is set to 170 when imported from remote PE routers, or the value is retained from the protocol preference value of the exported route when imported from other VRFs on the same router.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Policy name
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Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls vrf-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-target

Synopsis	Enter the vrf-target context
Context	configure service vpn <i>service-name</i> bgp-ipvpn mpls vrf-target
Tree	vrf-target
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

community *route-target*

Synopsis	Extended BGP community
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls vrf-target community <i>route-target</i>
Tree	community
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-community *route-target*

Synopsis	Communities sent to remote PE neighbors
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls vrf-target export-community <i>route-target</i>
Tree	export-community
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-community *route-target*

Synopsis	Communities accepted from remote PE neighbors
Context	configure service vprn <i>service-name</i> bgp-ipvpn mpls vrf-target import-community <i>route-target</i>
Tree	import-community

String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Notes	The following elements are part of a choice: community or (export-community and import-community).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-shared-queue

Synopsis	Enable the bgp-shared-queue context
Context	configure service vprn <i>service-name</i> bgp-shared-queue
Tree	bgp-shared-queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	Committed information rate for shared queue
Context	configure service vprn <i>service-name</i> bgp-shared-queue cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 100000000
Units	kilobps
Options	max
Default	4000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	Peak information rate for shared queue
Context	configure service vprn <i>service-name</i> bgp-shared-queue pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Units	kilobps

Options	max
Default	4000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-vpn-backup

Synopsis	Enter the bgp-vpn-backup context
Context	configure service vpn <i>service-name</i> bgp-vpn-backup
Tree	bgp-vpn-backup
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Allow BGP-VPN to be used as backup for IPv4 prefixes
Context	configure service vpn <i>service-name</i> bgp-vpn-backup ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Allow BGP-VPN to be used as backup for IPv6 prefixes
Context	configure service vpn <i>service-name</i> bgp-vpn-backup ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

carrier-carrier-vpn *boolean*

Synopsis	Allow VPRN service to support a Carrier Supporting Carrier model
Context	configure service vpn <i>service-name</i> carrier-carrier-vpn <i>boolean</i>

Tree	carrier-carrier-vpn
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confederation

Synopsis	Enter the confederation context
Context	configure service vpn <i>service-name</i> confederation
Tree	confederation
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confed-as-num *number*

Synopsis	Confederation number within an autonomous system
Context	configure service vpn <i>service-name</i> confederation confed-as-num <i>number</i>
Tree	confed-as-num
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

members [[as-number](#)] *number*

Synopsis	Add a list entry for members
Context	configure service vpn <i>service-name</i> confederation members <i>number</i>
Tree	members
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[as-number](#)] *number*

Synopsis	Confederation AS number
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Context	configure service vpn <i>service-name</i> confederation members <i>number</i>
Tree	members
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	configure service vpn <i>service-name</i> customer <i>reference</i>
Tree	customer
Reference	configure service customer <i>customer-name</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

d-path-length-ignore *boolean*

Synopsis	Enable D-PATH length ignore
Context	configure service vpn <i>service-name</i> d-path-length-ignore <i>boolean</i>
Tree	d-path-length-ignore
Description	<p>When configured to true, the VPRN RTM ignores the D-PATH domain segment length for best path selection purposes (for routes in the VPRN). This allows the user to control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p> <p>When configured to false, the router does not ignore the D-PATH domain segment length.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure service vprn <i>service-name</i> dhcp-server
Tree	dhcp-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv4 [[name](#)] *named-item*

Synopsis	Enter the dhcpv4 list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i>
Tree	dhcpv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	DHCP server name
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i>
Tree	dhcpv4
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the DHCP server

Context **configure** [service vprn](#) *service-name* [dhcp-server dhcpv4](#) *named-item* [admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [service vprn](#) *service-name* [dhcp-server dhcpv4](#) *named-item* [description description](#)

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

failover

Synopsis Enter the **failover** context

Context **configure** [service vprn](#) *service-name* [dhcp-server dhcpv4](#) *named-item* [failover](#)

Tree [failover](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the failover mechanism

Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.

Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>service vprn service-name dhcp-server dhcpv4 named-item failover partner-down-delay number</i>
Tree	<i>partner-down-delay</i>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [*address*] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>service vprn service-name dhcp-server dhcpv4 named-item failover peer reference</i>
Tree	<i>peer</i>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] reference

Synopsis	IP address of the failover peer
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag named-item**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> failover startup-wait-time <i>number</i>

Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> force-renews <i>boolean</i>
Tree	force-renews
Description	When configured to true , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-hold

Synopsis	Enter the lease-hold context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold
Tree	lease-hold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios
Tree	additional-scenarios

Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fwa-address-assignment *boolean*

Synopsis	Apply lease hold timer to FWA session
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios fwa-address-assignment <i>boolean</i>
Tree	fwa-address-assignment
Description	When configured to true , the router applies the lease hold timer to non-deferred IP addresses or SLAAC prefixes assigned to FWA sessions.
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Lease hold time
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> lease-hold time <i>number</i>
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [[pool-name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i>
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool-name] *named-item*

Synopsis	DHCP server pool name
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover

Synopsis	Enter the failover context
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover
Tree	failover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>

Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
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Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item failover partner-down-delay</i> <i>number</i>
Tree	<i>partner-down-delay</i>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [*address*] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item failover peer</i> <i>reference</i>
Tree	<i>peer</i>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item failover peer</i> <i>reference</i>
Tree	<i>peer</i>
Reference	configure <i>redundancy multi-chassis peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lease-time *number*

Synopsis	Maximum lease time
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> max-lease-time <i>number</i>
Tree	max-lease-time
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-lease-time *number*

Synopsis	Minimum lease time
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> min-lease-time <i>number</i>
Tree	min-lease-time
Range	10 to 315446399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-free

Synopsis	Enter the minimum-free context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item</i> <i>pool</i> <i>named-item</i> minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> minimum-free absolute <i>number</i>
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	<p>When configured to true, a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.</p> <p>When configured to false, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

nak-non-matching-subnet *boolean*

Synopsis Send NAK if no match for request address pool range

Context **configure** *service* *vpn* *service-name* *dhcp-server dhcpv4* *named-item pool* *named-item nak-non-matching-subnet* *boolean*

Tree *nak-non-matching-subnet*

Description When configured to **true**, a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK.

When configured to **false** or unconfigured, the system drops the DHCP packet.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

offer-time *number*

Synopsis Time interval during which a DHCP offer remains valid

Context **configure** *service* *vpn* *service-name* *dhcp-server dhcpv4* *named-item pool* *named-item offer-time* *number*

Tree *offer-time*

Range 10 to 600

Units seconds

Default 60

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

options

Synopsis Enter the **options** context

Context **configure** *service* *vpn* *service-name* *dhcp-server dhcpv4* *named-item pool* *named-item options*

Tree *options*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option as time duration
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item options option</i> (<i>number</i> <i>keyword</i>) <i>duration</i> <i>number</i>
Tree	<i>duration</i>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Remove DHCP option from the configuration
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item options option</i> (<i>number</i> <i>keyword</i>) <i>empty</i>
Tree	<i>empty</i>
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item options option</i> (<i>number</i> <i>keyword</i>) <i>hex-string</i> <i>hex-string</i>
Tree	<i>hex-string</i>
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address *ipv4-address*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>ipv4-address</i>
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subnet [[ipv4-prefix](#)] *ipv4-unicast-prefix*

Synopsis	Enter the subnet list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i>
Tree	subnet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-prefix] *ipv4-unicast-prefix*

Synopsis	IPv4 prefix for the subnet
Context	configure <i>service vprn</i> <i>service-name dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item subnet</i> <i>ipv4-unicast-prefix</i>
Tree	<i>subnet</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-range [start] *ipv4-unicast-address* end *ipv4-unicast-address*

Synopsis	Enter the address-range list instance
Context	configure <i>service vprn</i> <i>service-name dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item subnet</i> <i>ipv4-unicast-prefix</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	address-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[start] *ipv4-unicast-address*

Synopsis	Lower bound of the IP address range
Context	configure <i>service vprn</i> <i>service-name dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item subnet</i> <i>ipv4-unicast-prefix</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	address-range
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv4-unicast-address*

Synopsis	Upper bound of the IP address range
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Context	configure service vprn <i>service-name dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item subnet ipv4-unicast-prefix address-range ipv4-unicast-address end ipv4-unicast-address</i>
Tree	address-range
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover-control-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	configure service vprn <i>service-name dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item subnet ipv4-unicast-prefix address-range ipv4-unicast-address end ipv4-unicast-address failover-control-type keyword</i>
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	configure service vprn <i>service-name dhcp-server dhcpv4</i> <i>named-item pool</i> <i>named-item subnet ipv4-unicast-prefix drain boolean</i>
Tree	drain
Description	When configured to true , new leases cannot be assigned and existing leases are kept up until they are released. When configured to false , the subnet is active and new leases can be assigned.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude-addresses [**start**] *ipv4-unicast-address* **end** *ipv4-unicast-address*

Synopsis	Add a list entry for exclude-addresses
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> exclude-addresses <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	exclude-addresses
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[start] *ipv4-unicast-address*

Synopsis	Lower bound of the IP address range
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> exclude-addresses <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	exclude-addresses
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv4-unicast-address*

Synopsis	Upper bound of the IP address range
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> exclude-addresses <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	exclude-addresses
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-declined *number*

Synopsis	Maximum number of declined addresses allowed
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet ipv4-unicast-prefix maximum-declined <i>number</i>
Tree	maximum-declined
Max. range	0 to 4294967295
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-free

Synopsis	Enter the minimum-free context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet ipv4-unicast-prefix minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet ipv4-unicast-prefix minimum-free absolute <i>number</i>
Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet ipv4-unicast-prefix minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	<p>When configured to true, a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.</p> <p>When configured to false, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet ipv4-unicast-prefix minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet ipv4-unicast-prefix options
Tree	options
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

option [number] (*number* | *keyword*)

Synopsis Enter the **option** list instance

Context **configure** **service** **vpn** *service-name* **dhcp-server** **dhcpv4** *named-item* **pool** *named-item* **subnet** *ipv4-unicast-prefix* **options** **option** (*number* | *keyword*)

Tree **option**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** **service** **vpn** *service-name* **dhcp-server** **dhcpv4** *named-item* **pool** *named-item* **subnet** *ipv4-unicast-prefix* **options** **option** (*number* | *keyword*)

Tree **option**

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis DHCP option specified as an ASCII string

Context **configure** **service** **vpn** *service-name* **dhcp-server** **dhcpv4** *named-item* **pool** *named-item* **subnet** *ipv4-unicast-prefix* **options** **option** (*number* | *keyword*) **ascii-string** *string-not-all-spaces*

Tree **ascii-string**

String length 1 to 127

String format 'string-not-all-spaces' must contain at least one non-space character

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

duration *number*

Synopsis	DHCP option as time duration
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address *ipv4-address*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) ipv4-address <i>ipv4-address</i>
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool <i>named-item</i> subnet <i>ipv4-unicast-prefix</i> options option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-selection

Synopsis	Enter the pool-selection context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection
Tree	pool-selection
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-gi-address

Synopsis	Enable the use-gi-address context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection use-gi-address
Tree	use-gi-address
Description	<p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope *keyword*

Synopsis	GI address-matching scope
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection use-gi-address scope <i>keyword</i>
Tree	scope
Options	subnet, pool
Default	subnet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delimiter *string-not-all-spaces*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> pool-selection use-pool-from-client delimiter <i>string-not-all-spaces</i>
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String length	1
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-db *reference*

Synopsis	Local user database for authentication
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> user-db reference
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-identification *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv4 <i>named-item</i> user-identification keyword
Tree	user-identification
Options	mac-circuit-id, client-id, mac, circuit-id, remote-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcpv6 *[name] named-item*

Synopsis	Enter the dhcpv6 list instance
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i>
Tree	dhcpv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	DHCP server name
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i>
Tree	dhcpv6
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-provisioned *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> auto-provisioned <i>boolean</i>
Tree	auto-provisioned
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

defaults

Synopsis	Enter the defaults context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults
Tree	defaults
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [**number**] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**number**] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
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Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String length	1 to 127
String format	'domain-string' must be a DNS-style label sequence (RFC 1035)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time
Context	configure service vprn service-name dhcp-server dhcpv6 named-item defaults options option (number keyword) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
Context	configure service vprn service-name dhcp-server dhcpv6 named-item defaults options option (number keyword) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn service-name dhcp-server dhcpv6 named-item defaults options option (number keyword) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults options option (<i>number</i> <i>keyword</i>) ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Max. instances	4
Notes	<p>The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address.</p> <p>This element is ordered by the user.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults preferred-lifetime <i>number</i>
Tree	preferred-lifetime
Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>defaults</i> <i>rebind-time</i> <i>number</i>
Tree	<i>rebind-time</i>
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

renew-time *number*

Synopsis	Renew time for the lease
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>defaults</i> <i>renew-time</i> <i>number</i>
Tree	<i>renew-time</i>
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to</p>

extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 604800
Units	seconds
Default	1800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> defaults valid-lifetime <i>number</i>
Tree	valid-lifetime
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> description <i>description</i>

Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover

Synopsis	Enter the failover context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover
Tree	failover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item failover</i> maximum-client-lead-time <i>number</i>
Tree	<i>maximum-client-lead-time</i>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item failover</i> partner-down-delay <i>number</i>
Tree	<i>partner-down-delay</i>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough

	time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> ignore-rapid-commit <i>boolean</i>
Tree	ignore-rapid-commit
Description	When configured to true , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-id-mapping *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> interface-id-mapping <i>boolean</i>
Tree	interface-id-mapping
Description	When configured to true , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-hold

Synopsis	Enter the lease-hold context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold
Tree	lease-hold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold additional-scenarios

Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fwa-address-assignment *boolean*

Synopsis	Apply lease hold timer to FWA session
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold additional-scenarios fwa-address-assignment <i>boolean</i>
Tree	fwa-address-assignment
Description	When configured to true , the router applies the lease hold timer to non-deferred IP addresses or SLAAC prefixes assigned to FWA sessions.
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Lease hold time
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-hold time <i>number</i>
Tree	time
Range	1 to 631152000
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> lease-query <i>boolean</i>
Tree	lease-query
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool [[pool-name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i>
Tree	pool
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[pool-name] *named-item*

Synopsis	DHCP server pool name
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Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i>
Tree	<i>pool</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delegated-prefix

Synopsis	Enter the delegated-prefix context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>delegated-prefix</i>
Tree	<i>delegated-prefix</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>delegated-prefix</i> <i>length</i> <i>number</i>
Tree	<i>length</i>
Range	48 to 127
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum *number*

Synopsis	Maximum delegated prefix length for this pool
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>delegated-prefix</i> <i>maximum</i> <i>number</i>
Tree	<i>maximum</i>
Range	48 to 127
Default	64

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

minimum *number*

Synopsis Minimum delegated prefix length for this pool
Context **configure** *service* *vpn* *service-name* *dhcp-server dhcpv6* *named-item* *pool* *named-item* *delegated-prefix* **minimum** *number*
Tree *minimum*
Range 48 to 127
Default 48
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** *service* *vpn* *service-name* *dhcp-server dhcpv6* *named-item* *pool* *named-item* *description* **description** *description*
Tree *description*
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

exclude-prefix [*ipv6-prefix*] *ipv6-prefix*

Synopsis Add a list entry for **exclude-prefix**
Context **configure** *service* *vpn* *service-name* *dhcp-server dhcpv6* *named-item* *pool* *named-item* *exclude-prefix* **exclude-prefix** *ipv6-prefix*
Tree *exclude-prefix*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> exclude-prefix <i>ipv6-prefix</i>
Tree	exclude-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover

Synopsis	Enter the failover context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover
Tree	failover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover

Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
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Context	configure service vprn <i>service-name dhcp-server dhcpv6 named-item pool named-item failover partner-down-delay number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure service vprn <i>service-name dhcp-server dhcpv6 named-item pool named-item failover peer reference</i>
Tree	peer
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure service vprn <i>service-name dhcp-server dhcpv6 named-item pool named-item failover peer reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sync-tag *named-item*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover peer <i>reference</i> sync-tag <i>named-item</i>
Tree	sync-tag
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-wait-time *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string

String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String length	1 to 127
String format	'domain-string' must be a DNS-style label sequence (RFC 1035)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option specified as time
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
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Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> options option (<i>number</i> <i>keyword</i>) ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [ipv6-prefix] *ipv6-prefix*

Synopsis	Enter the prefix list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drain *boolean*

Synopsis	No new leases can be assigned
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> drain <i>boolean</i>
Tree	drain
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

failover-control-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
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Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix failover-control-type keyword</i>
Tree	failover-control-type
Options	local, remote, access-driven
Default	local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

options

Synopsis	Enter the options context
Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix options</i>
Tree	options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix options option</i> (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[number](#)] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix options option</i> (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis DHCP option specified as an ASCII string

Context **configure** [service vprn](#) *service-name* [dhcp-server dhcpv6](#) *named-item* [pool](#) *named-item* [prefix ipv6-prefix](#) [options option](#) (*number* | *keyword*) **ascii-string** *string-not-all-spaces*

Tree [ascii-string](#)

String length 1 to 127

String format 'string-not-all-spaces' must contain at least one non-space character

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

domain-string *string*

Synopsis DHCP option specified as a domain name

Context **configure** [service vprn](#) *service-name* [dhcp-server dhcpv6](#) *named-item* [pool](#) *named-item* [prefix ipv6-prefix](#) [options option](#) (*number* | *keyword*) **domain-string** *string*

Tree [domain-string](#)

String length 1 to 127

String format 'domain-string' must be a DNS-style label sequence (RFC 1035)

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

duration *number*

Synopsis DHCP option specified as time

Context **configure** [service vprn](#) *service-name* [dhcp-server dhcpv6](#) *named-item* [pool](#) *named-item* [prefix ipv6-prefix](#) [options option](#) (*number* | *keyword*) **duration** *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Empty DHCP option
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix ipv6-prefix options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix ipv6-prefix options option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-address *ipv6-address*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix ipv6-prefix options option (<i>number</i> <i>keyword</i>) ipv6-address <i>ipv6-address</i>
Tree	ipv6-address
Max. instances	4

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> preferred-lifetime <i>number</i>
Tree	preferred-lifetime
Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length-threshold [**prefix-length**] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix ipv6-prefix prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

absolute *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix ipv6-prefix prefix-length-threshold <i>number</i> absolute <i>number</i>
Tree	absolute
Range	1 to 4294967295
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix ipv6-prefix prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent *number*

Synopsis	Minimum percentage of free prefixes for prefix length
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Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix prefix-length-threshold number percent number</i>
Tree	percent
Range	1 to 100
Notes	The following elements are part of a choice: absolute or percent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-type

Synopsis	Enter the prefix-type context
Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix</i> prefix-type
Tree	prefix-type
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pd boolean

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	configure service vprn <i>service-name dhcp-server dhcpv6</i> <i>named-item pool</i> <i>named-item prefix ipv6-prefix</i> prefix-type pd <i>boolean</i>
Tree	pd
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wan-host boolean

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> prefix-type wan-host <i>boolean</i>
Tree	wan-host
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> rebind-time <i>number</i>
Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

renew-time *number*

Synopsis	Renew time for the lease
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix <i>ipv6-prefix</i> renew-time <i>number</i>
Tree	renew-time

Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix</i> <i>ipv6-prefix</i> valid-lifetime <i>number</i>
Tree	<i>valid-lifetime</i>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length-threshold [*prefix-length*] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix-length-threshold</i> <i>number</i>
Tree	<i>prefix-length-threshold</i>
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix-length-threshold</i> <i>number</i>
Tree	<i>prefix-length-threshold</i>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>dhcp-server dhcpv6</i> <i>named-item</i> <i>pool</i> <i>named-item</i> <i>prefix-length-threshold</i> <i>number</i> <i>event-when-depleted</i> <i>boolean</i>
Tree	<i>event-when-depleted</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-free-percent *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool <i>named-item</i> prefix-length-threshold <i>number</i> minimum-free-percent <i>number</i>
Tree	minimum-free-percent
Range	0 to 100
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-selection

Synopsis	Enter the pool-selection context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection
Tree	pool-selection
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-link-address

Synopsis	Enable the use-link-address context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection use-link-address
Tree	use-link-address
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scope *keyword*

Synopsis	Scope of the IP address selection
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection use-link-address scope <i>keyword</i>

Tree	scope
Options	subnet, pool
Default	subnet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection use-pool-from-client
Tree	use-pool-from-client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delimiter *string-not-all-spaces*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> pool-selection use-pool-from-client delimiter <i>string-not-all-spaces</i>
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String length	1
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-id

Synopsis	Enter the server-id context
Context	configure service vpn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> server-id
Tree	server-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid-enterprise

Synopsis	Enter the duid-enterprise context
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-enterprise
Tree	duid-enterprise
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-enterprise ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 58
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DUID enterprise server ID specified as a hex string
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-enterprise hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 118
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid-link-local

Synopsis	Derive DUID server ID from a system link-layer address
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> server-id duid-link-local
Tree	duid-link-local
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-db *reference*

Synopsis	Local user database to lookup DHCP lease data
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> user-db reference
Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-identification *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i> user-identification <i>keyword</i>
Tree	user-identification
Options	duid, interface-id, interface-id-link-local
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns

Synopsis	Enable the dns context
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Context	configure service vprn <i>service-name</i> dns
Tree	dns
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of DNS
Context	configure service vprn <i>service-name</i> dns admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-domain *fully-qualified-domain-name*

Synopsis	Domain name added in DNS retries
Context	configure service vprn <i>service-name</i> dns default-domain <i>fully-qualified-domain-name</i>
Tree	default-domain
Description	<p>This command configures the DNS domain name to be added in DNS retries when a DNS query is not replied or an empty DNS reply is received.</p> <p>The name can contain only alphabetical characters (A-Z), numeric characters (0-9), the minus sign (-), and the period (.).</p>
String length	1 to 255
String format	'default-domain' must be lowercase letters, digits, hyphen, dot (DNS label form)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-source-address (*keyword* | *ipv4-unicast-address*)

Synopsis	Source address to contact an IPv4 DNS server
Context	configure service vprn <i>service-name</i> dns ipv4-source-address (<i>keyword</i> <i>ipv4-unicast-address</i>)
Tree	ipv4-source-address
Options	use-interface-ip

Default	use-interface-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-source-address (*keyword* | *ipv6-unicast-address*)

Synopsis	Source address to contact an IPv6 DNS server
Context	configure service vpn <i>service-name</i> dns ipv6-source-address (<i>keyword</i> <i>ipv6-unicast-address</i>)
Tree	ipv6-source-address
Options	use-interface-ip
Default	use-interface-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	DNS server used for DNS name resolution
Context	configure service vpn <i>service-name</i> dns server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server
Max. instances	3
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	configure service vpn <i>service-name</i> ecmp <i>number</i>
Tree	ecmp
Description	<p>This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria:</p>

1. The system selects the lowest next hop router ID.
2. If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.

Range	1 to 128
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecmp-unequal-cost *boolean*

Synopsis	Enable ECMP unequal cost capability
Context	configure <i>service vpn</i> <i>service-name</i> ecmp-unequal-cost <i>boolean</i>
Tree	ecmp-unequal-cost
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label *boolean*

Synopsis	Use entropy label
Context	configure <i>service vpn</i> <i>service-name</i> entropy-label <i>boolean</i>
Tree	entropy-label
Description	<p>When configured to true, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the configure router mpls or configure router mpls lsp context.</p> <p>This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.</p> <p>The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.</p> <p>When configured to false, the use of entropy labels is disabled.</p>
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-neighbor-synchronization

Synopsis	Enable the evpn-neighbor-synchronization context
Context	configure service vprn <i>service-name</i> evpn-neighbor-synchronization
Tree	evpn-neighbor-synchronization
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of EVPN synchronization
Context	configure service vprn <i>service-name</i> evpn-neighbor-synchronization admin-state <i>keyword</i>
Tree	admin-state
Description	<p>This command configures local static and dynamic ARP and ND entries to be advertised using an EVPN MAC/IP advertisement route. On reception of those routes, ARP and ND entries are created on the routing context and interface identified by the EVI route target and the ESI.</p> <p>When unconfigured, local static and dynamic ARP and ND entries are not advertised.</p>
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

evi-route-target *evi-route-target*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVI route target to use for EVPN neighbor synchronization
Context	configure service vprn <i>service-name</i> evpn-neighbor-synchronization evi-route-target <i>evi-route-target</i>
Tree	evi-route-target

Description	This command configures the EVI route target used on the MAC/IP routes advertised for the routing context. On reception, the EVI route target is used to identify the routing context in which the ARP and ND entries are installed.
String length	10 to 28
String format	'evi-route-target-32' must be evi-target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Time that an EVPN ARP or ND entry is retained
Context	configure service vpn <i>service-name</i> evpn-neighbor-synchronization retention-timer <i>number</i>
Tree	retention-timer
Description	<p>This command sets the timer that determines how long an EVPN ARP or ND entry is retained after the remote PE withdraws the MAC/IP route that originated it. The behavior for a synchronized ARP and ND entry is as follows:</p> <ol style="list-style-type: none"> 1. When the originating EVPN MAC/IP route is withdrawn, the retention timer starts, and the entry remains present until the timer expires. 2. While the retention timer is active, the system attempts to refresh the entry by sending an ARP Request or Neighbor Solicitation to the IP owner. This refresh may occur at any point from the start of the timer until 30 seconds before it expires. 3. ARP Requests and Neighbor Solicitations are staggered within the timeout period to prevent overloading the CPM transmitter when many entries require refreshing.
Range	1 to 65535
Units	seconds
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

route-distinguisher *vpn-route-distinguisher*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route distinguisher used for synchronization
Context	configure service vpn <i>service-name</i> evpn-neighbor-synchronization route-distinguisher <i>vpn-route-distinguisher</i>

Tree	route-distinguisher
Description	This command configures the route distinguisher of the MAC/IP routes used for synchronization.
String format	'vpn-route-distinguisher' must be IP:comm or AS-number pair per RD rules
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

route-tag *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BGP route tag for MAC/IP routes synchronization
Context	configure service vpn <i>service-name</i> evpn-neighbor-synchronization route-tag <i>number</i>
Tree	route-tag
Description	This command applies the BGP route tag to MAC/IP routes generated from local ARP and ND entries. This tag can be matched by any export policy.
Range	1 to 255
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

export-inactive-bgp *boolean*

Synopsis	Export preferred BGP route even if inactive
Context	configure service vpn <i>service-name</i> export-inactive-bgp <i>boolean</i>
Tree	export-inactive-bgp
Description	<p>When configured to true, the preferred BGP route learned by a VPRN is exported as the VPN-IP route even if it is inactive in the route table because a preferred BGP VPRN route from another PE is present. This overrides the default state in which the VPRN cannot export an inactive BGP route. For the BGP route to be exported, the VRF export policy must accept it. This command applies to both MPLS VPN and SRv6 VPN routes. In SRv6 VPN routes the advertised instruction is an End.DT, while in MPLS VPN routes the advertised label is a per-next-hop label. This “best-external” type of route advertisement is useful in active/standby multi-homing scenarios because it ensures that all PEs know about the backup path provided by the standby PE.</p> <p>When configured to false, the preferred BGP route is not exported if it is inactive.</p>
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-inactive-bgp-enhanced *boolean*

Synopsis	Export best BGP route when better non-BGP route present
Context	configure <i>service vprn service-name</i> export-inactive-bgp-enhanced <i>boolean</i>
Tree	export-inactive-bgp-enhanced
Description	<p>When configured to true, the router allows a BGP route that is inactive (because a better non-BGP route for the same prefix is present) to be exportable as a VPN-IP route.</p> <p>A BGP route learned from a VPRN BGP peer is exportable as a VPN-IP route, only if it is the best route for the prefix and is installed in the route table of the VPRN. If the export-inactive-bgp command is true in the VPRN configuration, this rule is relaxed, and the best inactive VPRN BGP route is exportable as a VPN-IP route, provided that the active installed route for the prefix is an imported VPN-IP route.</p> <p>The rule described in the preceding paragraph can be relaxed even further by configuring this command to true. When this command is true, the best inactive VPRN BGP route (best amongst all routes received from all CEs) is exportable as a VPN-IP route, regardless of the route type of the active installed route.</p> <p>The configuration of this command overrides the export-inactive-bgp command. If this command is true, the export-inactive-bgp command does not need to be true.</p> <p>When configured to false, the router disables allowing an inactive BGP route in the presence of a better non-BGP route to be exportable as a VPN-IP route.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	configure <i>service vprn service-name</i> fib-priority <i>keyword</i>
Tree	fib-priority
Description	<p>This command prioritizes the order in which BGP FIB entries across different routing instances are pushed to the IOM for updating. This allows BGP route updates for higher priority router instances to occur as quickly as possible by assigning a FIB priority to the associated router instances (base and VPRN instances).</p> <p>If routing updates are available for multiple router instances, the IOMs or IMM update the FIB with entries with high priority router instances before entries with standard priority router instances.</p>
Options	standard – Standard FIB priority for routing instances

	high – High FIB priority for routing instances
Default	standard
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grt-leaking

Synopsis	Enter the grt-leaking context
Context	configure service vprn <i>service-name</i> grt-leaking
Tree	grt-leaking
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-local-management *boolean*

Synopsis	Enable management traffic
Context	configure service vprn <i>service-name</i> grt-leaking allow-local-management <i>boolean</i>
Tree	allow-local-management
Description	<p>When configured to true, this command enables the support of specific management protocols over VPRN interfaces that terminate on Base routing context IPv4 and IPv6 interface addresses, including Base loopback and system addresses.</p> <p>This command does not control the support for management protocols terminating on VPRN interfaces directly.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-grt

Synopsis	Enter the export-grt context
Context	configure service vprn <i>service-name</i> grt-leaking export-grt
Tree	export-grt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name or policy logical expression
Context	configure service vprn <i>service-name</i> grt-leaking export-grt policy-name (<i>policy-expr-string</i> <i>string</i>)
Tree	policy-name
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit *number*

Synopsis	Maximum number of routes exported from VRF to GRT
Context	configure service vprn <i>service-name</i> grt-leaking export-limit <i>number</i>
Tree	export-limit
Range	0 to 1000
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-v6-limit *number*

Synopsis	Maximum number of IPv6 routes exported from VPRN to GRT
Context	configure service vprn <i>service-name</i> grt-leaking export-v6-limit <i>number</i>
Tree	export-v6-limit
Range	0 to 1000
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grt-lookup *boolean*

Synopsis	Enable global route table lookup
Context	configure service vprn <i>service-name</i> grt-leaking grt-lookup <i>boolean</i>
Tree	grt-lookup
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-grt

Synopsis	Enter the import-grt context
Context	configure service vprn <i>service-name</i> grt-leaking import-grt
Tree	import-grt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name or policy logical expression
Context	configure service vprn <i>service-name</i> grt-leaking import-grt policy-name (<i>policy-expr-string</i> <i>string</i>)
Tree	policy-name
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label *boolean*

Synopsis	Include hash label
Context	configure service vprn <i>service-name</i> hash-label <i>boolean</i>

Tree	hash-label
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igmp

Synopsis	Enable the igmp context
Context	configure service vprn <i>service-name</i> igmp
Tree	igmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure service vprn <i>service-name</i> igmp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-if-query-source-address *ipv4-unicast-address*

Synopsis	Default query-source address for all group interfaces
Context	configure service vprn <i>service-name</i> igmp group-if-query-source-address <i>ipv4-unicast-address</i>
Tree	group-if-query-source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface *[ip-interface-name] interface-name*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy

Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vpn <i>service-name</i> igmp interface <i>interface-name</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure service vpn <i>service-name</i> igmp interface <i>interface-name</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
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Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> redundant-mcast <i>boolean</i>
Tree	redundant-mcast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> ssm-translate
Tree	ssm-translate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv4-multicast-address* [end](#) *ipv4-multicast-address*

Synopsis	Enter the group-range list instance
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv4-multicast-address*

Synopsis	Lower bound of the IP address group range
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>ssm-translate</i> <i>group-range</i> start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	<i>group-range</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv4-multicast-address*

Synopsis	Upper bound of the IP address group range
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>ssm-translate</i> <i>group-range</i> start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	<i>group-range</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [*source-address*] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>ssm-translate</i> <i>group-range</i> start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	<i>source</i>
Min. instances	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis Source IP address of multicast channel sending data

Context **configure** *service vprn* *service-name igmp* *interface interface-name* *ssm-translate group-range start ipv4-multicast-address end ipv4-multicast-address* *source ipv4-unicast-address*

Tree *source*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

static

Synopsis Enter the **static** context

Context **configure** *service vprn* *service-name igmp* *interface interface-name* *static*

Tree *static*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group [group-address] *ipv4-multicast-address*

Synopsis Enter the **group** list instance

Context **configure** *service vprn* *service-name igmp* *interface interface-name* *static group* *ipv4-multicast-address*

Tree *group*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[group-address] *ipv4-multicast-address*

Synopsis Group address of static IGMP multicast channel

Context **configure** *service vprn* *service-name igmp* *interface interface-name* *static group* *ipv4-multicast-address*

Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group <i>ipv4-multicast-address</i> source <i>ipv4-unicast-address</i>
Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
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Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group <i>ipv4-multicast-address</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv4-multicast-address* [end](#) *ipv4-multicast-address* [step](#) *ipv4-address*

Synopsis	Enter the group-range list instance
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> step <i>ipv4-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv4-multicast-address*

Synopsis	IP address for the start of the static group range
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> step <i>ipv4-address</i>
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv4-multicast-address*

Synopsis	IP address for the end of the static group range
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i> step <i>ipv4-address</i>
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

	'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

step *ipv4-address*

Synopsis	Step interval in the group-range address
Context	configure <i>service vprn</i> <i>service-name</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>static</i> <i>group-range</i> <i>start</i> <i>ipv4-multicast-address</i> <i>end</i> <i>ipv4-multicast-address</i> step <i>ipv4-address</i>
Tree	<i>group-range</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
MD-CLI default	0.0.0.1
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [*source-address*] *ipv4-unicast-address*

Synopsis	Add a list entry for source
Context	configure <i>service vprn</i> <i>service-name</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>static</i> <i>group-range</i> <i>start</i> <i>ipv4-multicast-address</i> <i>end</i> <i>ipv4-multicast-address</i> step <i>ipv4-address</i> source <i>ipv4-unicast-address</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[*source-address*] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure <i>service vprn</i> <i>service-name</i> <i>igmp</i> <i>interface</i> <i>interface-name</i> <i>static</i> <i>group-range</i> <i>start</i> <i>ipv4-multicast-address</i> <i>end</i> <i>ipv4-multicast-address</i> step <i>ipv4-address</i> source <i>ipv4-unicast-address</i>

Tree	source
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg

Synopsis	any source address (*,G)
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> static group-range start ipv4-multicast-address end ipv4-multicast-address step ipv4-address starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	IGMP protocol version
Context	configure service vprn <i>service-name</i> igmp interface <i>interface-name</i> version <i>keyword</i>
Tree	version
Options	1, 2, 3
Default	3
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

query-interval *number*

Synopsis Time between two consecutive host-query messages

Context **configure** **service** **vprn** *service-name* **igmp** **query-interval** *number*

Tree **query-interval**

Description This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.

Range 2 to 1024

Units seconds

Default 125

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

query-last-member-interval *number*

Synopsis Time between group-specific query messages

Context **configure** **service** **vprn** *service-name* **igmp** **query-last-member-interval** *number*

Tree **query-last-member-interval**

Description This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.

Range 1 to 1023

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages

Context **configure** **service** **vprn** *service-name* **igmp** **query-response-interval** *number*

Tree **query-response-interval**

Range 1 to 1023

Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vprn <i>service-name</i> igmp robust-count <i>number</i>
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, this value can be increased.
Range	2 to 10
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn <i>service-name</i> igmp ssm-translate
Tree	ssm-translate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv4-multicast-address* [end](#) *ipv4-multicast-address*

Synopsis	Enter the group-range list instance
Context	configure service vprn <i>service-name</i> igmp ssm-translate group-range start <i>ipv4-multicast-address</i> end <i>ipv4-multicast-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start ipv4-multicast-address

Synopsis	Lower bound of the IP address group range
Context	configure service vprn <i>service-name</i> igmp ssm-translate group-range start ipv4-multicast-address end ipv4-multicast-address
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end ipv4-multicast-address

Synopsis	Upper bound of the IP address group range
Context	configure service vprn <i>service-name</i> igmp ssm-translate group-range start ipv4-multicast-address end ipv4-multicast-address
Tree	group-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] [ipv4-unicast-address](#)

Synopsis	Add a list entry for source
Context	configure service vprn <i>service-name</i> igmp ssm-translate group-range start ipv4-multicast-address end ipv4-multicast-address source ipv4-unicast-address
Tree	source
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv4-unicast-address*

Synopsis	Source IP address of multicast channel sending data
Context	configure <i>service vprn service-name igmp ssm-translate group-range start ipv4-multicast-address end ipv4-multicast-address source ipv4-unicast-address</i>
Tree	<i>source</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-nh-metric *boolean*

Synopsis	Ignore next hop metric
Context	configure <i>service vprn service-name ignore-nh-metric boolean</i>
Tree	<i>ignore-nh-metric</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [*interface-name*] *interface-name*

Synopsis	Enter the interface list instance
Context	configure <i>service vprn service-name interface interface-name</i>
Tree	<i>interface</i>
Description	Commands in this context configure the interface options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[*interface-name*] *interface-name*

Synopsis	Interface name
Context	configure <i>service vprn service-name interface interface-name</i>
Tree	<i>interface</i>

String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

autoconfigure

Synopsis	Enter the autoconfigure context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure
Tree	autoconfigure
Description	Commands in this context configure the autoconfigure functionality for the interface.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4
Tree	ipv4
Description	Commands in this context configure IPv4 autoconfigure settings.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

dhcp-client

Synopsis	Enable the dhcp-client context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client
Tree	dhcp-client
Description	Commands in this context configure the node as an IPv4 DHCP client. When the node operates as a DHCP client, it learns the IP address of the interface via dynamic IP address assignment.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP client
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

class-id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the class-id context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id
Tree	class-id
Description	Commands in this context configure the vendor class ID for the DHCP client.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ascii-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Vendor class ID as an ASCII string
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 127
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

hex-string *hex-string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Vendor class ID as a hexadecimal string
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client class-id hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

client-id

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the client-id context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id
Tree	client-id
Description	Commands in this context configure the client ID for the DHCP client.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client ID as an ASCII string
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 127
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

hex-string *hex-string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client ID as a hexadecimal string
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client client-id hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

interface

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interface name as the client ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client <i>client-id</i> interface
Tree	interface
Description	This command configures the node to use the interface name as the client ID.
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

mac

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address as the client ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client <i>client-id</i> mac
Tree	mac
Description	This command configures the node to use the MAC address as the client ID.
Notes	The following elements are part of a choice: ascii-string , hex-string , interface , or mac .
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

lease-time (*number* | *keyword*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lease time the DHCP client requests
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client lease-time (<i>number</i> <i>keyword</i>)
Tree	lease-time
Description	This command configures the lease time that the DHCP client requests to the DHCP server. The DHCP server can override the configured value.
Range	10 to 315446399
Units	seconds
Options	infinite – Request an infinite lease with no expiry
Default	86400
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

request-options



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the request-options context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options
Tree	request-options
Description	Commands in this context configure the DHCP options to include in the parameter request list as part of the DHCPREQUEST message to the server.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

dns-server *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include the DNS server option
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options dns-server <i>boolean</i>
Tree	dns-server

Description	When configured to true , the node includes the DNS server option (Option 54) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

router *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include the router option
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options router <i>boolean</i>
Tree	router
Description	When configured to true , the node includes the router option (Option 3) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

static-route *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include the static route option
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> autoconfigure ipv4 dhcp-client request-options static-route <i>boolean</i>
Tree	static-route
Description	When configured to true , the node includes the static route option (Option 121) in the DHCPREQUEST message to the server.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> description <i>very-long-description</i>
Tree	<i>description</i>
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-tunnel-redundant-nexthop *ipv4-unicast-address*

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> dynamic-tunnel-redundant-nexthop <i>ipv4-unicast-address</i>
Tree	<i>dynamic-tunnel-redundant-nexthop</i>
Description	<p>This command configures a redundant next-hop address on a public or private IPsec interface (with a public or private tunnel SAP) for dynamic IPsec tunnel in 1:1 MC-IPsec. A standby node uses the specified next-hop address to shunt traffic to the master in case it receives traffic destined to a tunnel endpoint address. The standby tunnel group needs to be operationally up for the feature to work.</p> <p>The next-hop address is resolved in the routing table of a corresponding service.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> hold-time
Tree	<i>hold-time</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down

Synopsis	Enter the down context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 down seconds <i>number</i>

Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up

Synopsis	Enter the up context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down

Synopsis	Enter the down context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 down init-only <i>boolean</i>
Tree	init-only
Description	When configured to true , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up

Synopsis	Enter the up context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

if-attribute

Synopsis	Enter the if-attribute context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> if-attribute
Tree	if-attribute
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> if-attribute admin-group <i>reference</i>
Tree	admin-group

Description	This command specifies the administrative group membership to an interface. The configured administrative group membership is applied in all levels or areas the interface is participating in. The same interface cannot have different memberships in different levels or areas.
Reference	configure routing-options if-attribute admin-group <i>named-item</i>
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

srlg-group [[name](#)] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *reference*

Synopsis	SRLG name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ingress
Tree	ingress
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* **ip-mtu** *number*

Tree *ip-mtu*

Description This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.

Range 512 to 9786

Units bytes

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-tunnel-interface *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable IP tunnel interface

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* **ip-tunnel-interface** *boolean*

Tree *ip-tunnel-interface*

Description When configured to **true**, the system enables a GRE virtual IP interface.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipsec

Synopsis Enable the **ipsec** context

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* **ipsec**

Tree *ipsec*

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-exception *reference*

Synopsis	IP exception filter
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ip-exception <i>reference</i>
Tree	ip-exception
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	configure filter ip-exception <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-tunnel [[name](#)] *named-item*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec tunnel name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'name' must not start with a number (e.g. tunnel-1)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-designate *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-liveness**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dest-ip *ipv4-unicast-address***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
----------	--

Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness dest-ip <i>ipv4-unicast-address</i>
Tree	dest-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interface *interface-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

service-name *service-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> bfd bfd-liveness service-name <i>service-name</i>
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String length	1 to 64
String format	'service-name' must contain at least one non-space character

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

clear-df-bit *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-generation**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
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Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>icmp6-generation</i> <i>packet-too-big</i> <i>message-count</i> <i>number</i>
Tree	<i>message-count</i>
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>ip-mtu</i> <i>number</i>
Tree	<i>ip-mtu</i>
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

key-exchange



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i>
Tree	<i>key-exchange</i>
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **dynamic** context

Context **configure** *service vpn* *service-name* *interface interface-name* *ipsec ipsec-tunnel* *named-item key-exchange* **dynamic**

Tree **dynamic**

Notes The following elements are part of a choice: **dynamic** or **manual**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Attempt to establish a phase 1 exchange automatically

Context **configure** *service vpn* *service-name* *interface interface-name* *ipsec ipsec-tunnel* *named-item key-exchange* **dynamic** **auto-establish** *boolean*

Tree **auto-establish**

Description When configured to **true**, the system automatically attempts to establish a phase 1 exchange.

The system automatically establishes phase 1 SA as soon as the tunnel is provisioned and enabled. This command should only be configured on one side of the tunnel.

Static routes that use the **auto-establish** tunnel as the next hop are brought down when the tunnel goes down.

When configured to **false**, the system does not automatically attempt to establish a phase 1 exchange.

Default false

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish-sustain *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable sustain mode for auto-establish tunnels
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish-sustain <i>boolean</i>
Tree	auto-establish-sustain
Description	<p>When configured to true, the tunnel initiator keeps the IKE_SA and CHILD_SA up to prevent phase 2 expiry when there is no traffic, and starts a new exchange to establish a replacement when the peer deletes the SA.</p> <p>When configured to false, the tunnel initiator does not prevent the SA from expiring and does not establish a replacement when the peer deletes the SA.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert cert-profile <i>reference</i>

Tree	cert-profile
Reference	configure ipsec cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify primary <i>keyword</i>

Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic cert trust-anchor-profile reference
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the id context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
String length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic id ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>dynamic</i> <i>id</i> ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>ipv6</i>
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy *reference*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>dynamic</i> <i>ike-policy</i> <i>reference</i>
Tree	<i>ike-policy</i>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure <i>ipsec</i> <i>ike-policy</i> <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the ppk context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk
Tree	ppk
Description	Commands in this context configure the PPKs to use for dynamic keying of the IPsec tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPK ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk id <i>reference</i>
Tree	id
Reference	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

list reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPK list instance name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk list <i>reference</i>
Tree	list
Reference	configure ipsec ppk-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic pre-shared-key <i>encrypted-leaf</i>
Tree	pre-shared-key
Description	This command specifies the pre-shared key for authentication in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reverse-route-injection



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the reverse-route-injection context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection
Tree	reverse-route-injection
Description	<p>Commands in this context configure reverse route injection for IPsec tunnels.</p> <p>When reverse route injection is enabled, the system injects routes into the service based on the final TSr. One route is created for each TS in the TSr, with the prefix length as the longest number that covers the address range in the TS. The system removes the reverse route when the corresponding CHILD_SA is removed.</p>
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

metric number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Metric to use for reverse route injection
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection metric <i>number</i>
Tree	metric
Description	<p>This command configures the metric for reverse routes installed by reverse route injection. The system uses the metric when selecting a route to install in the route table.</p> <p>If there are multiple reverse routes with the same preference but different metrics, the lower cost (metric) route is installed.</p>
Range	0 to 65535
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

preference *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference to use for reverse route injection
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection preference <i>number</i>
Tree	preference
Description	This command configures the route preference assigned to reverse routes installed by reverse route injection. The system uses this preference when selecting a route to install in the route table. The lower the preference value, the more the route is preferred by the system.
Range	0 to 255
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

manual**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keys [[security-association](#)] *number* [direction](#) *keyword*

Synopsis	Enter the keys list instance
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[security-association] *number*

Synopsis	SA entry ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-key *hex-string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>hex-string</i>
Tree	authentication-key
String length	1 to 130
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encryption-key *hex-string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>hex-string</i>
Tree	encryption-key
String length	1 to 66
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> ipsec-transform <i>reference</i>
Tree	ipsec-transform
Reference	configure ipsec ipsec-transform <i>number</i>
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

spi number**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction keyword spi <i>number</i>
Tree	spi
Description	<p>This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.</p> <p>The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p>
Range	256 to 16383
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> local-gateway-address-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> max-history-key-records ike <i>number</i>
Tree	ike

Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pmtu-discovery-aging *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure service vpn service-name interface interface-name ipsec ipsec-tunnel named-item pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-sap *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	configure service vpn service-name interface interface-name ipsec ipsec-tunnel named-item private-sap <i>number</i>
Tree	private-sap
Range	0 to 4094
Notes	This element is mandatory.

Introduced25.3.R2

Platforms7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-service *service-name*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

SynopsisPrivate service name

Context**configure** **service** **vpn** *service-name* **interface** *interface-name* **ipsec** **ipsec-tunnel** *named-item* **private-service** *service-name*

Tree**private-service**

DescriptionThis command configures the private service name.

If unconfigured, the private service is the service where the secured interface resides.

String length1 to 64

String format' service-name' must contain at least one non-space character

Introduced25.3.R2

Platforms7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisTCP maximum segment size (MSS) adjustment

Context**configure** **service** **vpn** *service-name* **interface** *interface-name* **ipsec** **ipsec-tunnel** *named-item* **private-tcp-mss-adjust** *number*

Tree**private-tcp-mss-adjust**

DescriptionThis command specifies the TCP MSS to adjust for the tunnel on the private side.

When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.

Range512 to 9000

Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> remote-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-gateway-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

replay-window *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
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Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec ipsec-tunnel</i> <i>named-item replay-window</i> <i>number</i>
Tree	<i>replay-window</i>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

security-policy

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec ipsec-tunnel</i> <i>named-item security-policy</i>
Tree	<i>security-policy</i>
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec ipsec-tunnel</i> <i>named-item security-policy id</i> <i>number</i>
Tree	<i>id</i>
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

strict-match *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipsec-tunnel <i>named-item</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipsec ipv6-exception <i>reference</i>
Tree	ipv6-exception
Description	<p>This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface.</p> <p>When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.</p>
Reference	configure filter ipv6-exception <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-sap *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec public-sap number</i>
Tree	<i>public-sap</i>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-group *reference*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipsec tunnel-group reference</i>
Tree	<i>tunnel-group</i>
Reference	configure isa tunnel-group number
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> ipv4
Tree	<i>ipv4</i>
Description	Commands in this context configure the IPv4 command options for the interface.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

addresses

Synopsis Enter the **addresses** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4](#) [addresses](#)

Tree [addresses](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address [[ipv4-address](#)] *ipv4-unicast-address*

Synopsis Enter the **address** list instance

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4](#) [addresses](#) [address](#) *ipv4-unicast-address*

Tree [address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[[ipv4-address](#)] *ipv4-unicast-address*

Synopsis IPv4 address for the interface

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4](#) [addresses](#) [address](#) *ipv4-unicast-address*

Tree [address](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4](#) [addresses](#) [address](#) *ipv4-unicast-address* [prefix-length](#) *number*

Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 allow-directed-broadcasts <i>boolean</i>
Tree	allow-directed-broadcasts
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the BFD settings for the associated IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *number*

Synopsis	Receive interval
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd receive <i>number</i>
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Terminate on the CPM network processor auto – Terminate on the system-selected termination point fp – Terminate on the forwarding plane
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp

Synopsis	Enter the dhcp context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp
Tree	dhcp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of DHCP
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gi-address *ipv4-unicast-address*

Synopsis	GI address for the DHCP relay
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp gi-address <i>ipv4-unicast-address</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp lease-populate
Tree	lease-populate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-leases *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp lease-populate max-leases <i>number</i>
Tree	max-leases
Range	0 to 511999
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option-82

Synopsis	Enter the option-82 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 action <i>keyword</i>
Tree	action
Options	replace, drop, keep
Default	keep

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

circuit-id

Synopsis	Enter the circuit-id context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the circuit ID
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id

Synopsis	Use the SAP ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-id

Synopsis	Enter the remote-id context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	User-defined ASCII string for the remote ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac

Synopsis	Use the MAC address for the remote ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

none

Synopsis	Do not include the remote ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 remote-id none
Tree	none

Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i>
Tree	client-mac-address
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i>
Tree	pool-name
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i>
Tree	sap-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i>
Tree	service-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string-not-all-spaces*

Synopsis	User-defined ASCII string for the VSO
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option string <i>string-not-all-spaces</i>
Tree	string
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i>

Tree	system-id
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-server

Synopsis	Enter the proxy-server context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server
Tree	proxy-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

emulated-server *ipv4-unicast-address*

Synopsis	IP address used as the DHCP server address for the SAP
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp proxy-server emulated-server <i>ipv4-unicast-address</i>
Tree	emulated-server
Description	This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

lease-time

Synopsis Enter the **lease-time** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4 dhcp proxy-server lease-time](#)

Tree [lease-time](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4 dhcp proxy-server lease-time radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

value *number*

Synopsis DHCP lease time

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv4 dhcp proxy-server lease-time value](#) *number*

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

relay-plain-bootp *boolean*

Synopsis Enable relaying of plain BOOTP packets

Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-plain-bootp <i>boolean</i>
Tree	relay-plain-bootp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relay-proxy

Synopsis	Enable the relay-proxy context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-proxy
Tree	relay-proxy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i>
Tree	release-update-src-ip
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

siaddr-override *ipv4-unicast-address*

Synopsis	DHCP server IP address for address hiding function
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp relay-proxy siaddr-override <i>ipv4-unicast-address</i>
Tree	siaddr-override
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv4-unicast-address*

Synopsis	IP addresses for DHCP server requests
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp server <i>ipv4-unicast-address</i>
Tree	server
Description	<p>This command configures a list of servers that this interface forwards requests to.</p> <p>The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.</p>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	8
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip-addr *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp src-ip-addr <i>keyword</i>
Tree	src-ip-addr
Options	auto, gi-address
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trusted *boolean*

Synopsis	Relay untrusted packets
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp trusted <i>boolean</i>
Tree	trusted
Description	When configured to true , the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.

A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.

This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-arp *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 dhcp use-arp <i>boolean</i>
Tree	use-arp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp
Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

param-problem

Synopsis	Enter the param-problem context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirects

Synopsis	Enter the redirects context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4 icmp ttl-expired</i> <i>number</i> <i>number</i>
Tree	<i>number</i>
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4 icmp ttl-expired</i> <i>seconds</i> <i>number</i>
Tree	<i>seconds</i>
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unreachables

Synopsis	Enter the unreachables context
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4 icmp unreachables</i>
Tree	<i>unreachables</i>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachable admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachable number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 icmp unreachable seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ip-helper-address *ipv4-unicast-address*

Synopsis Gateway address

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* *ipv4* **ip-helper-address** *ipv4-unicast-address*

Tree *ip-helper-address*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

local-dhcp-server *reference*

Synopsis DHCP server for the interface

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* *ipv4* **local-dhcp-server** *reference*

Tree *local-dhcp-server*

Reference **configure** *service* *vpn* *service-name* *dhcp-server* *dhcpv4* *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nat

Synopsis Enable the **nat** context

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* *ipv4* **nat**

Tree *nat*

Description Commands in this context enable NAT and configure CPM NAT policies for the IPv4 interface.

These commands must be used in conjunction with NAT pools where the pool application is configured with the **configure service vpn outside pool applications use-interface-ip** command.

Introduced 25.7.R1

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-nat-policy *reference*

Synopsis	CPM NAT policy association with public IPv4 interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 nat cpm-nat-policy reference
Tree	cpm-nat-policy
Description	<p>This command associates a CPM NAT policy to the interface. The NAT policy applies to traffic that either originates from, or is destined to, the local node itself (CPM traffic). Specifically, it is used when the traffic is routed through a public NAT IPv4 interface in the outside routing context.</p> <p>A CPM NAT policy should be used when the local node communicates with public networks over NAT, and the source or destination is a local interface within the outside routing context. This can include the public IPv4 interface or any other interface assigned to that routing context.</p>
Reference	configure service nat cpm-nat-policy <i>external-named-item</i>
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-spf-nat-policy *reference*

Synopsis	CPM NAT policy for static port forwards
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 nat cpm-spf-nat-policy reference
Tree	cpm-spf-nat-policy
Description	<p>This command associates a CPM NAT policy to the interface for static port forwards. The configurations for traffic using static port forwards to a local IP address in the outside routing context are separate from those used for other CPM traffic going through NAT. This command allows the router to apply different NAT behavior for port-forwarded traffic than for general traffic originating from the local node.</p>
Reference	configure service nat cpm-nat-policy <i>external-named-item</i>
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery
Tree	neighbor-discovery

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-route

Synopsis	Enter the host-route context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery host-route
Tree	host-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

populate [[route-type](#)] *keyword*

Synopsis	Enter the populate list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Description	Commands in this context enable the creation of ARP or ND host route entries in the route table from a certain ARP or ND entry type.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[route-type](#)] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery host-route populate <i>keyword</i>
Tree	populate
Options	static – Host routes created from EVPN ARP or ND entries dynamic – Host routes created from dynamic ARP or ND entries evpn – Host routes created from EVPN entries evpn-local-es – Host routes created from EVPN local ES entries
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i>
Tree	learn-unsolicited
Description	<p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit

Synopsis	Enter the limit context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit
Tree	limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Generate log entries only if limit is reached
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Range	0 to 524288
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold value that triggers a warning message
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100

Units	percent
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

populate *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery populate <i>boolean</i>
Tree	populate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i>
Tree	proactive-refresh
Description	When configured to true , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to false , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic

that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery proxy-arp-policy reference
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery remote-proxy-arp boolean
Tree	remote-proxy-arp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-timer *number*

Synopsis	ARP retry interval
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery retry-timer number
Tree	retry-timer
Range	1 to 300

Units	deciseconds
Default	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor [[ipv4-address](#)] *ipv4-address*

Synopsis	Enter the static-neighbor list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-address] *ipv4-address*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i>
Tree	static-neighbor
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor <i>ipv4-address</i> mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor-unnumbered

Synopsis	Enable the static-neighbor-unnumbered context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary

Synopsis	Enable the primary context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 primary
Tree	primary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 primary address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 primary broadcast <i>keyword</i>
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 primary prefix-length <i>number</i>

Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 primary tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

secondary [[address](#)] *ipv4-unicast-address*

Synopsis	Enter the secondary list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>
Tree	secondary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>

Tree	secondary
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> broadcast <i>keyword</i>
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> igp-inhibit <i>boolean</i>
Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i> prefix-length <i>number</i>
Tree	prefix-length

Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 secondary ipv4-unicast-address tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.
Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unnumbered

Synopsis	Enter the unnumbered context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 unnumbered
Tree	unnumbered

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ip-address *ipv4-unicast-address*

Synopsis IP address for the interface

Context **configure** *service vprn* *service-name* *interface interface-name* *ipv4 unnumbered ip-address* *ipv4-unicast-address*

Tree *ip-address*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes The following elements are part of a choice: **ip-address** or **ip-int-name**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-int-name *interface-name*

Synopsis IP interface name

Context **configure** *service vprn* *service-name* *interface interface-name* *ipv4 unnumbered ip-int-name* *interface-name*

Tree *ip-int-name*

String length 1 to 32

Notes The following elements are part of a choice: **ip-address** or **ip-int-name**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

urpf-check

Synopsis Enable the **urpf-check** context

Context **configure** *service vprn* *service-name* *interface interface-name* *ipv4 urpf-check*

Tree *urpf-check*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Options	strict – Check source address match in RT and interface loose – Check source address match in RT only strict-no-ecmp – Check source address match in ECMP route
Default	strict
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrrp [[virtual-router-id](#)] *number*

Synopsis	Enter the vrrp list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i>
Tree	vrrp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i>
Tree	vrrp

Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Password for simple text authentication
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.

If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	1 to 94
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup ipv4-unicast-address

Synopsis	Virtual router IP addresses for the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number backup <i>ipv4-unicast-address</i>
Tree	backup
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7705 SAR Gen 2 Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip *ipv4-address*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> bfd-liveness dest-ip <i>ipv4-address</i>
Tree	dest-ip
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> bfd-liveness interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number bfd-liveness <i>service-name</i> <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number mac <i>mac-unicast-address</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p>

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

String format 'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** *service vprn service-name* *interface interface-name* *ipv4 vrrp number* **master-int-inherit** *boolean*

Tree **master-int-inherit**

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** *service vprn service-name* *interface interface-name* *ipv4 vrrp number* **message-interval** *number*

Tree **message-interval**

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Units	deciseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv4</i> <i>vrrp</i> <i>number</i> <i>monitor-oper-group</i> <i>reference</i>
Tree	<i>monitor-oper-group</i>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure <i>service</i> <i>oper-group</i> <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner

Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to false , this virtual router instance is designated as a non-owner.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> passive <i>boolean</i>
Tree	passive
Description	When configured to true , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down). When configured to false , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	When configured to true , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).

When configured to **false**, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	VRRP priority control policy
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> policy reference
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> preempt boolean
Tree	preempt
Description	When configured to true , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.

When configured to **false**, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Base priority for the VRRP
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh-reply boolean

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp number ssh-reply boolean
Tree	ssh-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6
Tree	ipv6
Description	Commands in this context configure IPv6 command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[ipv6-address](#)] *ipv6-address*

Synopsis	Enter the address list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i>
Tree	address
Description	<p>This command assigns an IPv6 address/subnet to the interface.</p> <p>Up to 16 total primary and secondary IPv4 and IPv6 addresses can be assigned to network interfaces, and up to 256 to access interfaces.</p> <p>Caution: Configurations must not exceed 16 secondary IP addresses when IPsec, GRE, L2TPv3, or IP in IP protocols are active on an access interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[ipv6-address\]](#) *ipv6-address*

Synopsis	IPv6 address assigned to the interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i>
Tree	address

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD). When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eui-64 *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> eui-64 <i>boolean</i>
Tree	eui-64
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> prefix-length <i>number</i>
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> primary-preference <i>number</i>
Tree	primary-preference
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag (*number* | *keyword*)

Synopsis	Route tag to be matched by BGP export policy rules
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 address <i>ipv6-address</i> tag (<i>number</i> <i>keyword</i>)
Tree	tag
Description	This command associates an administrative tag value with an interface IP address. This tag value is added to the IP FIB entries corresponding to the subnet route and host route

created by IP address configuration. This tag can be used to filter these routes when they are processed by a BGP export policy, a BGP RIB-management route table import policy, as IS-IS export policy or an OSPF export policy.

Range	1 to 4294967295
Options	no-tag
Default	no-tag
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

bfd

Synopsis	Enter the bfd context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd
Tree	bfd
Description	Commands in this context configure the BFD options for the associated IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000

Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *number*

Synopsis	Receive interval
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd receive <i>number</i>
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval *number*

Synopsis	Transmit interval
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000

Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 bfd type <i>keyword</i>
Tree	type
Options	cpm-np – Terminate on the CPM network processor auto – Terminate on the system-selected termination point fp – Terminate on the forwarding plane
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6
Tree	dhcp6
Description	Commands in this context configure the DHCPv6 command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

relay

Synopsis	Enter the relay context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay
Tree	relay
Description	Commands in this context configure the DHCPv6 relay command options for the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lease-populate

Synopsis	Enter the lease-populate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate
Tree	lease-populate
Description	Commands in this context configure the features of DHCPv6 leases on the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-nbr-of-leases *number*

Synopsis	Maximum lease state entries allowed for the interface
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate max-nbr-of-leases <i>number</i>
Tree	max-nbr-of-leases
Range	0 to 32767
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-populate

Synopsis	Enter the route-populate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate
Tree	route-populate
Description	Commands in this context configure the route populate command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

na *boolean*

Synopsis	Create route based on the IA_NA option
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate na <i>boolean</i>
Tree	na
Description	When configured to true , the router creates the route based on the IA_NA option in the Relay-Reply message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pd

Synopsis	Enable the pd context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate pd
Tree	pd

Description	When enabled, the router creates the route based on the IA_PD option in the Relay-Reply message.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Create blackhole route based on prefix exclude option
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate pd exclude <i>boolean</i>
Tree	exclude
Description	When configured to true , the router creates a blackhole route based on the PD_EXCLUDE option contained in the IA_PD option of the Relay-Reply message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ta *boolean*

Synopsis	Create route based on IA_TA option
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay lease-populate route-populate ta <i>boolean</i>
Tree	ta
Description	When configured to true , the router creates the route based on the IA_TA option in the Relay-Reply message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option

Synopsis	Enter the option context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-id

Synopsis	Enter the interface-id context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option interface-id
Tree	interface-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option interface-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option interface-id if-index
Tree	if-index
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 dhcp6 relay option interface-id sap-id
Tree	sap-id
Notes	The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string .

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

string *string-not-all-spaces*

Synopsis String for interface ID option in DHCPv6 relay packet
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay option](#) [interface-id](#) **string** *string-not-all-spaces*
Tree [string](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

remote-id *boolean*

Synopsis Send remote ID option in the DHCPv6 relay packet
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay option](#) [remote-id](#) *boolean*
Tree [remote-id](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

server *ipv6-address-with-zone*

Synopsis DHCPv6 server to which the DHCPv6 requests are forwarded
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 dhcp6 relay server](#) *ipv6-address-with-zone*
Tree [server](#)
String format 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Max. instances 8
Notes This element is ordered by the user.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

source-address *ipv6-unicast-or-linklocal-address*

Synopsis Source IPv6 address of the DHCPv6 relay messages
Context **configure** *service vprn* *service-name* *interface* *interface-name* *ipv6 dhcp6 relay source-address* *ipv6-unicast-or-linklocal-address*
Tree *source-address*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

duplicate-address-detection *boolean*

Synopsis Enable Duplicate Address Detection per interface
Context **configure** *service vprn* *service-name* *interface* *interface-name* *ipv6 duplicate-address-detection* *boolean*
Tree *duplicate-address-detection*
Default true
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

forward-ipv4-packets *boolean*

Synopsis Forward unencapsulated IPv4 packets
Context **configure** *service vprn* *service-name* *interface* *interface-name* *ipv6 forward-ipv4-packets* *boolean*
Tree *forward-ipv4-packets*
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

icmp6

Synopsis Enter the **icmp6** context
Context **configure** *service vprn* *service-name* *interface* *interface-name* *ipv6 icmp6*

Tree	icmp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-too-big

Synopsis	Enter the packet-too-big context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

param-problem

Synopsis	Enter the param-problem context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem
Tree	param-problem
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param-problem number <i>number</i>

Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 param- problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirects

Synopsis	Enter the redirects context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 redirects
Tree	redirects
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Redirect message sends
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 redirects admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6 icmp6 redirects</i> <i>number number</i>
Tree	<i>number</i>
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6 icmp6 redirects</i> <i>seconds number</i>
Tree	<i>seconds</i>
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time-exceeded

Synopsis	Enter the time-exceeded context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6 icmp6 time-exceeded</i>
Tree	<i>time-exceeded</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6 icmp6 time-exceeded admin-state keyword</i>

Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 time-exceeded seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unreachables

Synopsis	Enter the unreachables context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 unreachables
Tree	unreachables
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 unreachablees admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 unreachablees number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 icmp6 unreachablees seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-local-address

Synopsis	Enter the link-local-address context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 link-local-address
Tree	link-local-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-address*

Synopsis	IPv6 link-local address
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 link-local-address address <i>ipv6-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 link-local-address duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD) on the interface. When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 local-dhcp-server reference
Tree	local-dhcp-server
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	configure service vprn <i>service-name</i> dhcp-server dhcpv6 <i>named-item</i>

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#)
Tree [neighbor-discovery](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

host-route

Synopsis Enter the **host-route** context
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [host-route](#)
Tree [host-route](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

populate [[route-type](#)] *keyword*

Synopsis Enter the **populate** list instance
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [host-route](#) [populate](#) *keyword*
Tree [populate](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[[route-type](#)] *keyword*

Synopsis Type of ARP or ND entries that generate host routes
Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 neighbor-discovery](#) [host-route](#) [populate](#) *keyword*
Tree [populate](#)
Options static – Host routes created from EVPN ARP or ND entries
dynamic – Host routes created from dynamic ARP or ND entries

	evpn – Host routes created from EVPN entries evpn-local-es – Host routes created from EVPN local ES entries
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery learn-unsolicited <i>keyword</i>
Tree	learn-unsolicited
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set. When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit

Synopsis	Enter the limit context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit
Tree	limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only
Description	When configured to true , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to false , the router does not send the warning message.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Default	90
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i>
Tree	local-proxy-nd
Description	<p>When configured to true, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to false, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i>
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.

Options	global, link-local, both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i>
Tree	proxy-nd-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-neighbor [*ipv6-address*] *ipv6-address*

Synopsis	Enter the static-neighbor list instance
Context	configure service <i>vpn</i> <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery static-neighbor <i>ipv6-address</i>
Tree	static-neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-address*

Synopsis	IPv6 address corresponding to the physical address
Context	configure service <i>vpn</i> <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery static-neighbor <i>ipv6-address</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-address *mac-address*

Synopsis	MAC address for the static neighbor
Context	configure service <i>vpn</i> <i>service-name</i> interface <i>interface-name</i> ipv6 neighbor-discovery static-neighbor <i>ipv6-address</i> mac-address <i>mac-address</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure service <i>vpn</i> <i>service-name</i> interface <i>interface-name</i> ipv6 tcp-mss <i>number</i>
Tree	tcp-mss
Range	1220 to 9726
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

urpf-check

Synopsis Enable the **urpf-check** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 urpf-check](#)

Tree [urpf-check](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 urpf-check ignore-default](#) *boolean*

Tree [ignore-default](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis Unicast RPF check mode

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [ipv6 urpf-check mode](#) *keyword*

Tree [mode](#)

Options
 strict – Check source address match in RT and interface
 loose – Check source address match in RT only
 strict-no-ecmp – Check source address match in ECMP route

Default strict

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

vrrp [[virtual-router-id](#)] *number*

Synopsis Enter the **vrrp** list instance

Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i>
Tree	vrrp
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i>
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup ipv6-address

Synopsis	Virtual router IP addresses for the interface
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number backup ipv6-address
Tree	backup
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7705 SAR Gen 2 Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> bfd-liveness dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> bfd-liveness interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> bfd-liveness service-name <i>service-name</i>

Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure service vprn service-name interface interface-name ipv6 vrrp number init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure service vprn service-name interface interface-name ipv6 vrrp number mac <i>mac-unicast-address</i>
Tree	mac
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>

String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> master-int-inherit <i>boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> message-interval <i>number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none"> When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as the master. When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.

- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	10 to 4095
Units	centiseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group *reference*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner
Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6</i> <i>vrrp</i> <i>number</i> passive <i>boolean</i>
Tree	passive
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6</i> <i>vrrp</i> <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy reference

Synopsis	VRRP priority control policy
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> policy reference
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preempt boolean

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp <i>number</i> preempt boolean
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority number

Synopsis	Base priority for the VRRP
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number priority number
Tree	priority
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-forwarding boolean

Synopsis	Allow standby router to forward traffic
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number standby-forwarding boolean
Tree	standby-forwarding
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-reply boolean

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ipv6 vrrp number telnet-reply boolean
Tree	telnet-reply
Description	When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface

can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).

When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>ipv6 vrrp number</i> <i>traceroute-reply boolean</i>
Tree	<i>traceroute-reply</i>
Description	<p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>load-balancing</i>
Tree	<i>load-balancing</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>load-balancing ip-load-balancing keyword</i>

Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopback *boolean*

Synopsis	Use interface as a loopback interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> loopback <i>boolean</i>
Tree	loopback
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	MAC address for the interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> mac <i>mac-unicast-address</i>
Tree	mac
Description	This command assigns a specific MAC address to an IP interface.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-accounting *boolean*

Synopsis	Enable MAC accounting functionality
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> mac-accounting <i>boolean</i>
Tree	mac-accounting
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

monitor-oper-group *reference*

Synopsis Operational group to monitor

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* **monitor-oper-group** *reference*

Tree [monitor-oper-group](#)

Reference **configure** [service oper-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

multi-chassis-shunting-profile *reference*

Synopsis Multi-chassis shunting profile name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* **multi-chassis-shunting-profile** *reference*

Tree [multi-chassis-shunting-profile](#)

Description This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.

Reference **configure** [service vprn](#) *service-name* [ipsec multi-chassis-shunting-profile](#) *named-item*

Notes The following elements are part of a choice: **multi-chassis-shunting-profile** or **(dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop)**.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ptp-hw-assist

Synopsis Enter the **ptp-hw-assist** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* **ptp-hw-assist**

Tree [ptp-hw-assist](#)

Description Commands in this context enable the port-based timestamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.

Only one interface per physical port can have port-based timestamping assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the PTP timestamping assist
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sap [[sap-id](#)] *sap*

Synopsis	Enter the sap list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i>
Tree	sap
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sap-id] *sap*

Synopsis	SAP ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i>
Tree	sap
String length	1 to 45
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SAP
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bandwidth *number*

Synopsis	SAP bandwidth
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap bandwidth <i>number</i>
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Collect accounting statistics
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *long-description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap description long-description
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap dist-cpu-protection reference
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

agg-rate

Synopsis	Enter the agg-rate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress agg-rate
Tree	agg-rate
Notes	The following elements are part of a choice: agg-rate or percent-agg-rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress agg-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate *number*

Synopsis	Enforced aggregate rate for all queues
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress agg-rate rate <i>number</i>
Tree	rate
Range	1 to 6400000000
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress filter
Tree	filter

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy

Tree	policer-control-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority [*priority-level*] *number*

Synopsis	Enter the priority list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[priority-level] *number*

Synopsis	Priority level
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-egress

Synopsis	Enter the sap-egress context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress
Tree	sap-egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-id] *reference*

Synopsis	Policer unique ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>qos-policy-name</i> policer <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456

Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir

Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides policer <i>reference</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[queue-id] reference

Synopsis Policer unique ID

Context **configure** [service vprn](#) *service-name* [interface interface-name](#) [sap sap](#) [egress qos sap-egress overrides queue](#) *reference*

Tree [queue](#)

Reference **configure** [qos sap-egress](#) *qos-policy-name* [queue](#) *number*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

adaptation-rule

Synopsis Enter the **adaptation-rule** context

Context **configure** [service vprn](#) *service-name* [interface interface-name](#) [sap sap](#) [egress qos sap-egress overrides queue](#) *reference* **adaptation-rule**

Tree [adaptation-rule](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir keyword

Synopsis Constraint used when deriving the operational CIR value

Context **configure** [service vprn](#) *service-name* [interface interface-name](#) [sap sap](#) [egress qos sap-egress overrides queue](#) *reference* [adaptation-rule](#) **cir** *keyword*

Tree [cir](#)

Options max, min, closest

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

pir keyword

Synopsis Constraint used when deriving the operational PIR value

Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Description	<p>This command configures overrides for the average frame overhead. The overrides supersede the average frame overhead configuration under the queue.</p> <p>For a full description of this command, see the configure qos network-queue queue avg-frame-overhead and configure qos sap-egress queue avg-frame-overhead contexts.</p>
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos sap-egress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

parent

Synopsis Enter the **parent** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos sap-egress overrides queue](#) *reference* [parent](#)

Tree [parent](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos sap-egress overrides queue](#) *reference* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos sap-egress overrides queue](#) *reference* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [egress qos sap-egress overrides queue](#) *reference* [percent-rate](#)

Tree [percent-rate](#)

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of port queue group
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

overrides

Synopsis Enter the **overrides** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [egress qos](#) [scheduler-policy overrides](#)

Tree [overrides](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis Enter the **scheduler** list instance

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [egress qos](#) [scheduler-policy overrides scheduler](#) *named-item*

Tree [scheduler](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[scheduler-name] *named-item*

Synopsis Scheduler name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [egress qos](#) [scheduler-policy overrides scheduler](#) *named-item*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap egress qos scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Scheduler policy name
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> egress qos scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos policer-control-policy
Tree	policer-control-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enable the overrides context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos policer-control-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

root

Synopsis	Enter the root context
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root
Tree	root
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds
Tree	priority-mbs-thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance

Context **configure** [service](#) [vpn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress](#) [qos](#) [policer-control-policy overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*

Tree [priority](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[priority-level] *number*

Synopsis Priority level

Context **configure** [service](#) [vpn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress](#) [qos](#) [policer-control-policy overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mbs-contribution (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed

Context **configure** [service](#) [vpn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress](#) [qos](#) [policer-control-policy overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)

Tree [mbs-contribution](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis	Policer control policy name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos policer-control-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sap-ingress

Synopsis	Enter the sap-ingress context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress
Tree	sap-ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress fp-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

instance *number*

Synopsis Queue group instance

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

overrides

Synopsis Enter the **overrides** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides](#)

Tree [overrides](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides](#) [policer](#) *reference*

Tree [policer](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[policer-id] *reference*

Synopsis Policer unique ID

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ingress qos sap-ingress overrides](#) [policer](#) *reference*

Tree [policer](#)

Reference	configure qos sap-ingress qos-policy-name policer number
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vprn service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure service vprn service-name interface interface-name sap sap ingress qos sap-ingress overrides policer reference packet-byte-offset number
Tree	packet-byte-offset
Range	-32 to 31

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-rate

Synopsis	Enter the percent-rate context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i>

Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

queue [\[queue-id\]](#) *reference*

Synopsis	Enter the queue list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[queue-id] *reference*

Synopsis	Policer unique ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides queue <i>reference</i>
Tree	queue
Reference	configure qos sap-ingress <i>qos-policy-name</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cbs (*number* | *keyword*)

Synopsis	CBS
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 2097151
Units	kilobytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-tail

Synopsis	Enter the drop-tail context
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

low

Synopsis	Enter the low context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low
Tree	low
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs (*number* | *keyword*)

Synopsis	MBS
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 2147482624
Units	bytes
Options	auto
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

parent

Synopsis Enter the **parent** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [ingress qos sap-ingress overrides queue](#) *reference* [parent](#)

Tree [parent](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [ingress qos sap-ingress overrides queue](#) *reference* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [ingress qos sap-ingress overrides queue](#) *reference* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap](#) [sap](#) [ingress qos sap-ingress overrides queue](#) *reference* [percent-rate](#)

Tree [percent-rate](#)

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir *decimal-number*

Synopsis	CIR percent rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir *decimal-number*

Synopsis	PIR percent rate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR rate
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Policy ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos sap-ingress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-ingress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy
Tree	scheduler-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overrides

Synopsis	Enter the overrides context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides
Tree	overrides
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scheduler [[scheduler-name](#)] *named-item*

Synopsis	Enter the scheduler list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[scheduler-name](#)] *named-item*

Synopsis	Scheduler name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i>
Tree	scheduler
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the

policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

parent

Synopsis	Enter the parent context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> parent
Tree	parent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> parent weight <i>number</i>

Tree	weight
Range	0 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate
Tree	rate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cir (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pir (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ingress qos scheduler-policy overrides scheduler <i>named-item</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap sap ingress qos scheduler-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos scheduler-policy](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip-tunnel [[tunnel-name](#)] *interface-name*

Synopsis Enter the **ip-tunnel** list instance

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap sap ip-tunnel](#) *interface-name*

Tree [ip-tunnel](#)

Max. instances 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[tunnel-name] *interface-name*

Synopsis IP tunnel name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [sap sap ip-tunnel](#) *interface-name*

Tree [ip-tunnel](#)

String length 1 to 32

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IP tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

backup-remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> backup-remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	backup-remote-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.

	When configured to false , clearing of the DF bit is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

delivery-service *service-name*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> delivery-service <i>service-name</i>
Tree	delivery-service
Description	<p>This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.</p> <p>The GRE tunnel does not come up until a valid delivery service is configured.</p>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dest-ip [**dest-ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for dest-ip
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[dest-ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote IP tunnel endpoint
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dscp keyword**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ip-tunnel <i>interface-name</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gre-header



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the gre-header context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ip-tunnel <i>interface-name</i> gre-header
Tree	gre-header
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key
Tree	key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive number

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key receive <i>number</i>
Tree	receive
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send number

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send key of the GRE header
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> gre-header key send <i>number</i>
Tree	send
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-generation

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation
Tree	icmp-generation
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required
Tree	frag-required
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the interval command.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service vpn <i>service-name</i> interface interface-name sap sap ip-tunnel interface-name icmp6-generation
Tree	icmp6-generation
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

packet-too-big

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service vpn <i>service-name</i> interface interface-name sap sap ip-tunnel interface-name icmp6-generation packet-too-big
Tree	packet-too-big
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	configure service vpn <i>service-name</i> interface interface-name sap sap ip-tunnel interface-name icmp6-generation packet-too-big admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>sap</i> <i>sap</i> <i>ip-tunnel</i> <i>interface-name</i> <i>icmp6-generation</i> <i>packet-too-big</i> number <i>number</i>
Tree	<i>number</i>
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

seconds *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>sap</i> <i>sap</i> <i>ip-tunnel</i> <i>interface-name</i> <i>icmp6-generation</i> <i>packet-too-big</i> seconds <i>number</i>
Tree	<i>seconds</i>
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.</p> <p>When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.</p>
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transport-mode-profile *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> ipsec-transport-mode-profile <i>reference</i>
Tree	ipsec-transport-mode-profile
Reference	configure ipsec ipsec-transport-mode-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> local-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-ip-address
Description	<p>This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).</p> <p>When this command specifies an IPv6 address, it must be a global unicast address.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pmtu-discovery-aging *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> propagate-pmtu-v6 <i>boolean</i>

Tree	propagate-pmtu-v6
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ip-tunnel <i>interface-name</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reassemble (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap sap ip-tunnel <i>interface-name</i> reassemble (<i>number</i> <i>keyword</i>)
Tree	reassemble
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ip-tunnel <i>interface-name</i> remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-ip-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec-gateway [**name**] *named-item*

Synopsis	Enter the ipsec-gateway list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i>
Tree	ipsec-gateway
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec gateway name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i>
Tree	ipsec-gateway
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis Administrative state of the IPsec gateway

Context **configure** [service vpn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ipsec-gateway](#) *named-item* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert

Synopsis Enter the **cert** context

Context **configure** [service vpn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ipsec-gateway](#) *named-item* **cert**

Tree [cert](#)

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis Certificate profile name

Context **configure** [service vpn](#) *service-name* [interface](#) *interface-name* [sap](#) *sap* [ipsec-gateway](#) *named-item* **cert** **cert-profile** *reference*

Tree [cert-profile](#)

Reference **configure** [ipsec](#) **cert-profile** *named-item*

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify

Synopsis Enter the **status-verify** context

Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> cert status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> cert status-verify primary <i>keyword</i>
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> cert status-verify secondary <i>keyword</i>

Tree	secondary
Options	none, cri, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

client-db

Synopsis	Enable the client-db context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> client-db
Tree	client-db
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fallback *boolean*

Synopsis	Fall back to the default authentication policy
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> client-db fallback <i>boolean</i>
Tree	fallback
Description	When configured to true , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.

When configured to **false** and the client database lookup fails to return a matched result, the system fails the tunnel setup.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

name *reference*

Synopsis	Client database name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> client-db name <i>reference</i>
Tree	name
Reference	configure ipsec client-db <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-secure-service

Synopsis	Enable the default-secure-service context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> default-secure-service
Tree	default-secure-service
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interface *interface-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> default-secure-service interface <i>interface-name</i>
Tree	interface
String length	1 to 32

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

service-name *service-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> default-secure-service service-name <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-tunnel-template *reference*

Synopsis	Default tunnel policy template for the gateway
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> default-tunnel-template <i>reference</i>
Tree	default-tunnel-template
Reference	configure ipsec tunnel-template <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-address-assignment

Synopsis	Enter the dhcp-address-assignment context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> dhcp-address-assignment
Tree	dhcp-address-assignment
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcpv4

Synopsis	Enable the dhcpv4 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4
Tree	dhcpv4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gi-address *ipv4-unicast-address***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 gi-address <i>ipv4-unicast-address</i>
Tree	gi-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

send-release *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 send-release <i>boolean</i>
Tree	send-release
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

server

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the server context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 server
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv4-unicast-address*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 server address <i>ipv4-unicast-address</i>
Tree	address

Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vprn-loose*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv4 server router-instance <i>router-instance-base-vprn-loose</i>
Tree	router-instance
String length	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcpv6

Synopsis	Enable the dhcpv6 context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6
Tree	dhcpv6
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

link-address *ipv6-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Link address of the relayed DHCPv6 packets
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 link-address <i>ipv6-unicast-address</i>
Tree	link-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv6 release message when IPsec tunnel removed
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 send-release <i>boolean</i>
Tree	send-release
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

server



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the server context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 server
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv6-unicast-address*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 server address <i>ipv6-unicast-address</i>
Tree	address
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vprn-loose*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> dhcp-address-assignment dhcpv6 server router-instance router-instance-base-vpn-loose
Tree	router-instance
String length	1 to 64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy reference

Synopsis	IKE policy ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> ike-policy <i>reference</i>
Tree	ike-policy
Reference	configure ipsec ike-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local

Synopsis	Enter the local context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> local
Tree	local
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-assignment

Synopsis	Enable the address-assignment context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> local address-assignment
Tree	address-assignment
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv4 context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-server *named-item***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 dhcp-server <i>named-item</i>
Tree	dhcp-server
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool *named-item***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vpn-loose***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv4 router-instance <i>router-instance-base-vpn-loose</i>
Tree	router-instance
String length	1 to 64
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary-pool *named-item***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	configure service vprn <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> local address-assignment ipv4 secondary-pool <i>named-item</i>
Tree	secondary-pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the ipv6 context
Context	configure service vprn <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> local address-assignment ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dhcp-server *named-item***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	configure service vprn <i>service-name</i> interface interface-name sap sap ipsec-gateway <i>named-item</i> local address-assignment ipv6 dhcp-server <i>named-item</i>
Tree	dhcp-server

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool *named-item*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv6 pool <i>named-item</i>
Tree	pool
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

router-instance *router-instance-base-vpn-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local address-assignment ipv6 router-instance <i>router-instance-base-vpn-loose</i>
Tree	router-instance
String length	1 to 64
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

gateway-address (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local gateway-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	gateway-address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id

Synopsis	Enter the id context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id
Tree	id
Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id auto
Tree	auto
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
String length	1 to 255
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> local id ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> local id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> max-history-key-records
Tree	max-history-key-records
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp number

Synopsis	Maximum number of recent records
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike number

Synopsis	Maximum number of historical IKE keys recorded
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-gateway <i>named-item</i> max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

removed-tunnels *number*

Synopsis	Maximum number of removed tunnels to record keys
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> max-history-key-records removed-tunnels <i>number</i>
Tree	removed-tunnels
Description	This command configures the maximum number of removed tunnels on the IPsec gateway for which to record IKE and ESP keys. When the number of recorded tunnels reaches the configured limit, the system removes the oldest tunnel from the history to record the newest tunnel. If this command is modified to a lower limit than the current number of recorded tunnels, the system immediately removes as many of the oldest tunnels as needed to comply with the new limit.
Range	1 to 256
Introduced	26.10.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mixed-tunnel-mode**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the mixed-tunnel-mode context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> mixed-tunnel-mode
Tree	mixed-tunnel-mode
Description	Commands in this context configure the IPsec gateway to support both remote access and dynamic LAN-to-LAN tunnels. When unconfigured, support of both tunnel types is disabled.
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf*

Synopsis	Pre-shared key for the IPsec gateway
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> pre-shared-key <i>encrypted-leaf</i>
Tree	pre-shared-key

Description	This command specifies the pre-shared key for the IPsec gateway in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

radius

Synopsis	Enter the radius context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> radius
Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

accounting-policy reference

Synopsis	RADIUS accounting policy
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> radius accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure ipsec radius accounting-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-policy reference

Synopsis	RADIUS authentication policy
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> radius authentication-policy <i>reference</i>
Tree	authentication-policy
Reference	configure ipsec radius authentication-policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-gateway <i>named-item</i> ts-list <i>reference</i>
Tree	ts-list
Reference	configure ipsec ts-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-tunnel [[name](#)] *named-item*

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	IPsec tunnel name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'name' must not start with a number (e.g. tunnel-1)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the IPsec tunnel
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> bfd
Tree	bfd
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-designate *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> bfd bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dest-ip ipv4-unicast-address

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> bfd bfd-liveness dest-ip <i>ipv4-unicast-address</i>
Tree	dest-ip
String format	<p>'ipv4-address' must use only digits and dots (no %zone)</p> <p>'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)</p>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interface *interface-name***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> bfd bfd-liveness interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

service-name *service-name***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> bfd bfd-liveness service-name <i>service-name</i>
Tree	service-name
Description	This command configures the name of the service where BFD traffic is forwarded to.
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

copy-traffic-class-upon-decapsulation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dest-ip [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for dest-ip
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Private IP address of the remote IP tunnel endpoint
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encapsulated-ip-mtu *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **icmp-generation** context

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* *sap* *sap* *ipsec-tunnel* *named-item* **icmp-generation**

Tree **icmp-generation**

Description Commands in this context configure settings for ICMPv4 message generation.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **frag-required** context

Context **configure** *service* *vpn* *service-name* *interface* *interface-name* *sap* *sap* *ipsec-tunnel* *named-item* **icmp-generation** **frag-required**

Tree **frag-required**

Description Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p>

The private MTU for the tunnel is configured via the **configure router interface ipsec ipsec-tunnel ip-mtu** command for the interface.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

interval *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

message-count *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure service vprn <i>service-name</i> interface interface-name sap sap ipsec-tunnel <i>named-item icmp6-generation packet-too-big message-count</i> <i>number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ip-mtu *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure service vprn <i>service-name</i> interface interface-name sap sap ipsec-tunnel <i>named-item ip-mtu</i> <i>number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange
Tree	key-exchange
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Description	When configured to true , the system automatically attempts to establish a phase 1 exchange.

The system automatically establishes phase 1 SA as soon as the tunnel is provisioned and enabled. This command should only be configured on one side of the tunnel.

Static routes that use the **auto-establish** tunnel as the next hop are brought down when the tunnel goes down.

When configured to **false**, the system does not automatically attempt to establish a phase 1 exchange.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

auto-establish-sustain *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable sustain mode for auto-establish tunnels
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic auto-establish-sustain <i>boolean</i>
Tree	auto-establish-sustain
Description	<p>When configured to true, the tunnel initiator keeps the IKE_SA and CHILD_SA up to prevent phase 2 expiry when there is no traffic, and starts a new exchange to establish a replacement when the peer deletes the SA.</p> <p>When configured to false, the tunnel initiator does not prevent the SA from expiring and does not establish a replacement when the peer deletes the SA.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic cert
Tree	cert

Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good

Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure service vpn service-name interface interface-name sap sap ipsec-tunnel named-item key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure service vpn service-name interface interface-name sap sap ipsec-tunnel named-item key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure service vpn service-name interface interface-name sap sap ipsec-tunnel named-item key-exchange dynamic cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile

Reference	configure ipsec trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the id context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> • Psk: local tunnel IP address • Cert-auth: subject of the local certificate
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

fqdn *fully-qualified-domain-name***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic id fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
String length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 *ipv4-unicast-address***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic id ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike-policy *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ppk



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the ppk context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk
Tree	ppk
Description	Commands in this context configure the PPKs to use for dynamic keying of the IPsec tunnel.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPK ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk id <i>reference</i>
Tree	id
Reference	configure ipsec ppk-list <i>named-item</i> ppk <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

list reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPK list instance name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic ppk list <i>reference</i>
Tree	list
Reference	configure ipsec ppk-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pre-shared-key *encrypted-leaf*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic pre-shared-key encrypted-leaf
Tree	pre-shared-key
Description	This command specifies the pre-shared key for authentication in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

reverse-route-injection



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the reverse-route-injection context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection
Tree	reverse-route-injection
Description	Commands in this context configure reverse route injection for IPsec tunnels. When reverse route injection is enabled, the system injects routes into the service based on the final TSr. One route is created for each TS in the TSr, with the prefix length as the longest number that covers the address range in the TS. The system removes the reverse route when the corresponding CHILD_SA is removed.
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Metric to use for reverse route injection
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection metric <i>number</i>
Tree	metric

Description	This command configures the metric for reverse routes installed by reverse route injection. The system uses the metric when selecting a route to install in the route table. If there are multiple reverse routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

preference *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference to use for reverse route injection
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange dynamic reverse-route-injection preference <i>number</i>
Tree	preference
Description	This command configures the route preference assigned to reverse routes installed by reverse route injection. The system uses this preference when selecting a route to install in the route table. The lower the preference value, the more the route is preferred by the system.
Range	0 to 255
Default	0
Introduced	26.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange manual
Tree	manual

Notes	The following elements are part of a choice: dynamic or manual .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

keys [[security-association](#)] *number direction keyword*

Synopsis	Enter the keys list instance
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[security-association] *number*

Synopsis	SA entry ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

authentication-key *hex-string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>hex-string</i>
Tree	authentication-key
String length	1 to 130
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

encryption-key *hex-string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>hex-string</i>
Tree	encryption-key
String length	1 to 66
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipsec-transform *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
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Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>sap</i> <i>sap</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>manual</i> <i>keys</i> <i>number</i> <i>direction</i> <i>keyword</i> <i>ipsec-transform</i> <i>reference</i>
Tree	<i>ipsec-transform</i>
Reference	configure <i>ipsec</i> <i>ipsec-transform</i> <i>number</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

spi *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>sap</i> <i>sap</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>key-exchange</i> <i>manual</i> <i>keys</i> <i>number</i> <i>direction</i> <i>keyword</i> <i>spi</i> <i>number</i>
Tree	<i>spi</i>
Description	<p>This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.</p> <p>The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p>
Range	256 to 16383
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure <i>service vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>sap</i> <i>sap</i> <i>ipsec-tunnel</i> <i>named-item</i> <i>max-history-key-records</i>

Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

esp number

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ike number

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> max-history-key-records ike <i>number</i>
Tree	ike
Range	1 to 3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pmtu-discovery-aging *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

private-tcp-mss-adjust *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v4 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-tunnel <i>named-item</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

propagate-pmtu-v6 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-tunnel <i>named-item</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

public-tcp-mss-adjust (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
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Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-tunnel <i>named-item</i> security-policy
Tree	security-policy
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

id reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec security policy ID
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-tunnel <i>named-item</i> security-policy id <i>reference</i>
Tree	id
Reference	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

strict-match boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap sap ipsec-tunnel <i>named-item</i> security-policy strict-match <i>boolean</i>
Tree	strict-match
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p>

If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tunnel-endpoint



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the tunnel-endpoint context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> tunnel-endpoint
Tree	tunnel-endpoint
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

delivery-service *service-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delivery service name
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> tunnel-endpoint delivery-service <i>service-name</i>
Tree	delivery-service
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address used for tunnel of the remote security gateway
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> tunnel-endpoint local-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-gateway-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> ipsec-tunnel <i>named-item</i> tunnel-endpoint remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-ip-address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

lag

Synopsis	Enter the lag context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-service-site *reference*

Synopsis	Multi service site name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> sap <i>sap</i> multi-service-site <i>reference</i>
Tree	multi-service-site
Reference	configure service customer <i>customer-name</i> multi-service-site <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis	SDP binding ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-policy *reference*

Synopsis	Policy to collect accounting statistics
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> accounting-policy <i>reference</i>

Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

collect-stats *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

egress

Synopsis Enter the **egress** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [egress](#)

Tree [egress](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter

Synopsis Enter the **filter** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [egress](#) [filter](#)

Tree [filter](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [egress](#) [filter](#) [ip](#) *reference*

Tree [ip](#)

Reference **configure** [filter](#) [ip-filter](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [egress](#) [filter](#) [ipv6](#) *reference*

Tree [ipv6](#)

Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> egress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-redirect-group

Synopsis	Enter the port-redirect-group context
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Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress qos network port-redirect-group</i>
Tree	<i>port-redirect-group</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the egress port queue group
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress qos network port-redirect-group group-name reference</i>
Tree	<i>group-name</i>
Reference	configure <i>qos queue-group-templates egress queue-group named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Queue-group instance ID
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress qos network port-redirect-group instance number</i>
Tree	<i>instance</i>
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>interface</i> <i>interface-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i> <i>egress vc-label number</i>
Tree	<i>vc-label</i>
Range	16 to 1048575

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> entropy-label
Tree	entropy-label
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-label

Synopsis	Enable the hash-label context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label
Tree	hash-label
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the <i>7705 SAR Gen 2 MPLS Guide</i> .
Notes	The following elements are part of a choice: entropy-label or hash-label .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> hash-label signal-capability
Tree	signal-capability
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes. The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ingress

Synopsis Enter the **ingress** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [ingress](#)

Tree [ingress](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

filter

Synopsis Enter the **filter** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [ingress filter](#)

Tree [filter](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [ingress filter ip reference](#)

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [spoke-sdp](#) *sdp-bind-id* [ingress filter ipv6 reference](#)

Tree [ipv6](#)

Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network

Synopsis	Enter the network context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group
Tree	fp-redirect-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group group-name <i>reference</i>

Tree	group-name
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-name *reference*

Synopsis	Network policy ID
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress qos network policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

vc-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> vc-type <i>keyword</i>
Tree	vc-type
Options	ether – Ethernet pseudowire associated with SDP binding ipipe – Ipipe pseudowire associated with SDP binding
Default	ether
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-tunnel-redundant-nexthop *ipv4-unicast-address*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> static-tunnel-redundant-nexthop <i>ipv4-unicast-address</i>
Tree	static-tunnel-redundant-nexthop
Description	<p>This command configures a redundant next-hop address on a public or private IPsec interface (with a public or private tunnel SAP) for a static IPsec tunnel in 1:1 MC-IPsec. A standby node uses the specified next-hop address to shunt traffic to the master in case it receives traffic destined to a tunnel endpoint address. The standby tunnel group needs to be operationally up for the feature to work.</p> <p>The next-hop address is resolved in the routing table of the corresponding service.</p>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop) .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Options	trusted, untrusted
Default	trusted
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> tunnel <i>boolean</i>
Tree	tunnel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vas-if-type *keyword*

Synopsis	VAS interface type
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> vas-if-type <i>keyword</i>
Tree	vas-if-type
Options	to-from-access, to-from-network, to-from-both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpls [**vpls-name**] *named-item-64*

Synopsis	Enter the vpls list instance
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i>
Tree	vpls
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[vpls-name] *named-item-64*

Synopsis	VPLS service
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i>
Tree	vpls
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reclassify-using-qos *reference*

Synopsis	Egress QoS policy
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress reclassify-using-qos <i>reference</i>
Tree	reclassify-using-qos
Reference	configure qos sap-egress <i>qos-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

routed-override-filter

Synopsis	Enter the routed-override-filter context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress routed-override-filter
Tree	routed-override-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress routed-override-filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> egress routed-override-filter ipv6 <i>reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn

Synopsis	Enter the evpn context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn
Tree	evpn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

arp

Synopsis	Enter the arp context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp
Tree	arp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise [**route-type**] *keyword*

Synopsis	Enter the advertise list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp advertise <i>keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp advertise <i>keyword</i>
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic, evpn-local-es
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-less-routing

Synopsis	Enable the interface-less-routing context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp advertise <i>keyword</i> interface-less-routing
Tree	interface-less-routing
Description	Commands in this context enable the entries for advertisement in EVPN MAC/IP advertisement routes that include: <ul style="list-style-type: none"> the label1 and route target of the R-VPLS EVPN service the label2 value and route target of the EVPN interface-less instance in the linked VPRN
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn-instance *number*

Synopsis	EVPN interface-less VPRN instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp advertise <i>keyword</i> interface-less-routing bgp-evpn-instance <i>number</i>
Tree	bgp-evpn-instance
Description	This command configures the EVPN interface-less BGP instance from which the label and route target are taken when advertising the entry in an EVPN MAC/IP advertisement route.
Range	1
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp advertise <i>keyword</i> route-tag <i>number</i>
Tree	route-tag

Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-local-es

Synopsis	Enter the evpn-local-es context
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp evpn-local-es
Tree	evpn-local-es
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

entry-type *keyword*

Synopsis	Type of EVPN entry
Context	configure service vpn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp evpn-local-es entry-type <i>keyword</i>
Tree	entry-type
Description	<p>This command configures the type of EVPN entry.</p> <p>When configured to evpn, received EVPN MAC/IP advertisement routes matching a local ESI to create an ARP or ND route of type EVPN are enabled.</p> <p>When configured to evpn-local-es, ARP or ND entries are classified as the EVPN local ES type. The EVPN local ES ARP or ND entries then trigger the local router to advertise corresponding MAC/IP advertisement routes with the proxy bit set if the advertise evpn-local-es command is configured.</p>
Options	evpn – Allow EVPN routes to be advertised evpn-local-es – Allow EVPN local ES routes to be advertised
Default	evpn
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Retention timer of the entry
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp evpn-local-es retention-timer <i>number</i>
Tree	retention-timer
Description	The timer defines how long the EVPN local ES entry is retained. While the timer is active, the router sends ARP requests or neighbor solicitations for the entry to the local ES. If a response is received, the entry is converted into a dynamic entry. The command can only be set to a value different from 0 if the entry type is configured as EVPN local ES.
Range	0 to 65535
Units	seconds
Default	0
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

flood-garp-and-unknown-req *boolean*

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp flood-garp-and-unknown-req <i>boolean</i>
Tree	flood-garp-and-unknown-req
Description	When configured to true , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to false , CPM-originated ARP flooding is suppressed.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn arp learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Description	When configured to true , the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to false , learning is disabled and table entries are not created for these messages.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nd

Synopsis	Enter the nd context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd
Tree	nd
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise [**route-type**] *keyword*

Synopsis	Enter the advertise list instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The learn-dynamic command must be set to false when using this functionality.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**route-type**] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i>
Tree	advertise
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic, evpn-local-es
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface-less-routing

Synopsis	Enable the interface-less-routing context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i> interface-less-routing
Tree	interface-less-routing
Description	Commands in this context enable the entries for advertisement in EVPN MAC/IP advertisement routes that include: <ul style="list-style-type: none"> the label1 and route target of the R-VPLS EVPN service the label2 value and route target of the EVPN interface-less instance in the linked VPRN
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-evpn-instance *number*

Synopsis	EVPN interface-less VPRN instance
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i> interface-less-routing bgp-evpn-instance <i>number</i>
Tree	bgp-evpn-instance
Description	This command configures the EVPN interface-less BGP instance from which the label and route target are taken when advertising the entry in an EVPN MAC/IP advertisement route.
Range	1
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
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Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd advertise <i>keyword</i> route-tag <i>number</i>
Tree	route-tag
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-local-es

Synopsis	Enter the evpn-local-es context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd evpn-local-es
Tree	evpn-local-es
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

entry-type *keyword*

Synopsis	Type of EVPN entry
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd evpn-local-es entry-type <i>keyword</i>
Tree	entry-type
Description	<p>This command configures the type of EVPN entry.</p> <p>When configured to evpn, received EVPN MAC/IP advertisement routes matching a local ESI to create an ARP or ND route of type EVPN are enabled.</p> <p>When configured to evpn-local-es, ARP or ND entries are classified as the EVPN local ES type. The EVPN local ES ARP or ND entries then trigger the local router to advertise corresponding MAC/IP advertisement routes with the proxy bit set if the advertise evpn-local-es command is configured.</p>
Options	evpn – Allow EVPN routes to be advertised evpn-local-es – Allow EVPN local ES routes to be advertised
Default	evpn
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

retention-timer *number*

Synopsis	Retention timer of the entry
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd evpn-local-es retention-timer <i>number</i>
Tree	retention-timer
Description	The timer defines how long the EVPN local ES entry is retained. While the timer is active, the router sends ARP requests or neighbor solicitations for the entry to the local ES. If a response is received, the entry is converted into a dynamic entry. The command can only be set to a value different from 0 if the entry type is configured as EVPN local ES.
Range	0 to 65535
Units	seconds
Default	0
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

learn-dynamic *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn nd learn-dynamic <i>boolean</i>
Tree	learn-dynamic
Description	When configured to true , the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to false , learning is disabled and table entries are not created for these messages.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

evpn-tunnel

Synopsis	Enable the evpn-tunnel context
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn-tunnel
Tree	evpn-tunnel

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-bfd *boolean*

Synopsis	Allow BFD on the EVPN tunnel
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn-tunnel allow-bfd <i>boolean</i>
Tree	allow-bfd
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-gateway-address *keyword*

Synopsis	Type of IPv6 gateway address
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn-tunnel ipv6-gateway-address <i>keyword</i>
Tree	ipv6-gateway-address
Options	ip, mac
Default	ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

supplementary-broadcast-domain *boolean*

Synopsis	Use the EVPN tunnel as a Supplementary Broadcast Domain
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> evpn-tunnel supplementary-broadcast-domain <i>boolean</i>
Tree	supplementary-broadcast-domain
Description	<p>When configured to true, this command allows the EVPN tunnel to be used as a Supplementary Broadcast Domain (SBD). The SBD is used in EVPN OISM to advertise the SMET routes and to receive the multicast traffic on egress PEs that are not attached to the source R-VPLS service.</p> <p>When configured to false, this command disables EVPN tunnel use as an SBD.</p>
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ingress

Synopsis Enter the **ingress** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [ingress](#)

Tree [ingress](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

routed-override-filter

Synopsis Enter the **routed-override-filter** context

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [ingress](#) [routed-override-filter](#)

Tree [routed-override-filter](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *service-name* [interface](#) *interface-name* [vpls](#) *named-item-64* [ingress](#) [routed-override-filter](#) [ip](#) *reference*

Tree [ip](#)

Description This command specifies an IP filter that is applied to routed unicast ingress packets entering the VPLS service and destined to the R-VPLS interface MAC address.

The filter overrides any existing ingress IP filter applied to SAPs or SDP bindings for packets associated with the routing IP interface. The override filter is optional and when it is not defined or it is removed, the IP routed packets use the existing ingress IP filter configured on the VPLS endpoint.

Reference **configure** [filter ip-filter](#) *filter-name*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>service-name</i> interface <i>interface-name</i> vpls <i>named-item-64</i> ingress routed-override-filter ipv6 <i>reference</i>
Tree	ipv6
Description	<p>This command specifies an IPv6 filter that is applied to routed unicast ingress packets entering the VPLS service and destined to the R-VPLS interface MAC address.</p> <p>The filter overrides any existing ingress IP filter applied to SAPs or SDP bindings for packets associated with the routing IP interface. The override filter is optional and when it is not defined or it is removed, the IP routed packets use the existing ingress IP filter configured on the VPLS endpoint.</p>
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-mirror-interface [[interface-name](#)] *interface-name*

Synopsis	Enter the ip-mirror-interface list instance
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i>
Tree	ip-mirror-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i>
Tree	ip-mirror-interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [[sdp-bind-id](#)] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis	SDP binding ID
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Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i>
Tree	spoke-sdp
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress

Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vc-label *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Spoke SDP ingress VC label
Context	configure service vprn <i>service-name</i> ip-mirror-interface <i>interface-name</i> spoke-sdp <i>sdp-bind-id</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-transport [[ipt-id](#)] *port*

Synopsis	Enter the ip-transport list instance
Context	configure service vpn <i>service-name</i> ip-transport <i>port</i>
Tree	ip-transport
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ipt-id] *port*

Synopsis	IP Transport identifier.
Context	configure service vpn <i>service-name</i> ip-transport <i>port</i>
Tree	ip-transport
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the IP transport.
Context	configure service vpn <i>service-name</i> ip-transport <i>port</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	Description for the IP transport.
Context	configure service vpn <i>service-name</i> ip-transport <i>port</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

dscp-name *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	dscp name
Context	configure service vpn service-name ip-transport port dscp-name keyword
Tree	dscp-name
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	ef
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

filter-unknown-host *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/Disable unknown host filtering.
Context	configure service vpn service-name ip-transport port filter-unknown-host boolean
Tree	filter-unknown-host
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

local-host

Synopsis	Enter the local-host context
Context	configure service vpn service-name ip-transport port local-host
Tree	local-host

Introduced 26.3.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ip-address *ipv4-unicast-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 address used for this local host.
Context **configure** *service vpn* *service-name ip-transport* *port local-host ip-address ipv4-unicast-address*
Tree *ip-address*
String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced 26.3.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port-num *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP/UDP port number.
Context **configure** *service vpn* *service-name ip-transport* *port local-host port-num number*
Tree *port-num*
Range 1026 to 49150
Introduced 26.3.R1
Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

protocol *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Protocol used.

Context	configure service vprn <i>service-name</i> ip-transport <i>port</i> local-host <i>protocol</i> <i>keyword</i>
Tree	protocol
Options	tcp, udp
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-host [**remote-host-id**] *number*

Synopsis	Enter the remote-host list instance
Context	configure service vprn <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i>
Tree	remote-host
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[remote-host-id] *number*

Synopsis	remote host identifier
Context	configure service vprn <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i>
Tree	remote-host
Range	1 to 2147483647
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *description*

Synopsis	User provided description for the remote host.
Context	configure service vprn <i>service-name</i> ip-transport <i>port</i> remote-host <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ip-address *ipv4-unicast-address***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address used for this remote host.
Context	configure service vpn <i>service-name</i> ip-transport port remote-host <i>number</i> ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port-num *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TCP/UDP port number.
Context	configure service vpn <i>service-name</i> ip-transport port remote-host <i>number</i> port-num <i>number</i>
Tree	port-num
Range	1 to 65535
Notes	This element is mandatory.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

remote-host-name *string*

Synopsis	User provided name for the remote host.
Context	configure service vpn <i>service-name</i> ip-transport port remote-host <i>number</i> remote-host-name <i>string</i>
Tree	remote-host-name
String length	1 to 64

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tcp

Synopsis	Enter the tcp context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ip-transport</i> <i>port</i> <i>tcp</i>
Tree	<i>tcp</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

inactivity-timeout *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Length of time to wait before disconnecting an inactive TCP connection.
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ip-transport</i> <i>port</i> <i>tcp</i> <i>inactivity-timeout</i> <i>number</i>
Tree	<i>inactivity-timeout</i>
Range	1 to 65535
Units	seconds
Default	30
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

max-retries *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of max retries.
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ip-transport</i> <i>port</i> <i>tcp</i> <i>max-retries</i> <i>number</i>
Tree	<i>max-retries</i>
Range	0 to 10

Default	5
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

retry-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Length of time to wait before a TCP retry.
Context	configure service vprn <i>service-name</i> ip-transport <i>port</i> tcp retry-interval <i>number</i>
Tree	retry-interval
Range	0 to 300
Units	seconds
Default	5
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ipsec

Synopsis	Enter the ipsec context
Context	configure service vprn <i>service-name</i> ipsec
Tree	ipsec
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

allow-reverse-route-override-type *keyword*

Synopsis	System behavior for new reverse route
Context	configure service vprn <i>service-name</i> ipsec allow-reverse-route-override-type <i>keyword</i>
Tree	allow-reverse-route-override-type
Description	<p>This command specifies the system behavior when a new reverse route overlaps with an existing reverse route.</p> <p>When unconfigured, the system does not allow a new dynamic LAN-to-LAN tunnel that terminates in the private VPRN service to be created with an overlapping reverse route.</p>

Options	same-idi, any-idi
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-chassis-shunt-interface [\[name\]](#) *reference*

Synopsis	Enter the multi-chassis-shunt-interface list instance
Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunt-interface <i>reference</i>
Tree	multi-chassis-shunt-interface
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *reference*

Synopsis	Multi-chassis shunt interface name
Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunt-interface <i>reference</i>
Tree	multi-chassis-shunt-interface
Reference	configure service vpn <i>service-name</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

next-hop

Synopsis	Enter the next-hop context
Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunt-interface <i>reference</i> next-hop
Tree	next-hop
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address for the shunting interface
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Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunt-interface <i>reference</i> next-hop address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-chassis-shunting-profile [**name**] *named-item*

Synopsis	Enter the multi-chassis-shunting-profile list instance
Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunting-profile <i>named-item</i>
Tree	multi-chassis-shunting-profile
Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	Multi-chassis shunting profile name
Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunting-profile <i>named-item</i>
Tree	multi-chassis-shunting-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

peer [**ip-address**] *reference*

Synopsis	Enter the peer list instance
Context	configure service vpn <i>service-name</i> ipsec multi-chassis-shunting-profile <i>named-item</i> peer <i>reference</i>
Tree	peer
Max. instances	3
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[ip-address] *reference*

Synopsis Peer address

Context **configure service vprn** *service-name* **ipsec multi-chassis-shunting-profile** *named-item* **peer** *reference*

Tree **peer**

Reference **configure redundancy multi-chassis peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

multi-chassis-shunt-interface *reference*

Synopsis Multi-chassis shunt interface

Context **configure service vprn** *service-name* **ipsec multi-chassis-shunting-profile** *named-item* **peer** *reference* **multi-chassis-shunt-interface** *reference*

Tree **multi-chassis-shunt-interface**

Reference **configure service vprn** *service-name* **ipsec multi-chassis-shunt-interface** *reference*

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

overlapping-reverse-route *boolean*

Synopsis Accept overlapping DL2L tunnel reverse routes

Context **configure service vprn** *service-name* **ipsec overlapping-reverse-route** *boolean*

Tree **overlapping-reverse-route**

Description When configured to **true**, the router accepts overlapping DL2L tunnel reverse routes from different tunnels and installs the routes based on the preference, metric, or ECMP configuration.

When configured to **false**, the router does not accept overlapping reverse routes and handles the overlapping route according to the **configure service vprn ipsec allow-reverse-route-override-type** command configuration.

This command is mutually exclusive with the **allow-reverse-route-override-type** command.

See the *7705 SAR Gen 2 Multiservice ISA and ESA Guide* for more information.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

security-policy [[id](#)] *number*

Synopsis	Enter the security-policy list instance
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i>
Tree	security-policy
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[id] *number*

Synopsis	IPsec security policy ID
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i>
Tree	security-policy
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[entry-id] *number*

Synopsis	IPsec security policy entry ID
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i>

Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-ip

Synopsis	Enter the local-ip context
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ip
Tree	local-ip
Description	<p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv4-prefix*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ip address <i>ipv4-prefix</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ip any <i>boolean</i>
Tree	any
Default	false

Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

local-ipv6

Synopsis	Enter the local-ipv6 context
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6
Tree	local-ipv6
Description	<p>Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv6-prefix*

Synopsis	Destination IPv6 address of the aggregate route
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 address <i>ipv6-prefix</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ip

Synopsis	Enter the remote-ip context
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip
Tree	remote-ip
Description	Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address *ipv4-prefix*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip address <i>ipv4-prefix</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any *boolean*

Synopsis	Use any IP address
Context	configure service vpn <i>service-name</i> ipsec security-policy <i>number</i> entry <i>number</i> remote-ip any <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

remote-ipv6

Synopsis	Enter the remote-ipv6 context
Context	configure <i>service vpn service-name ipsec security-policy number entry number</i> remote-ipv6
Tree	remote-ipv6
Description	<p>Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address ipv6-prefix

Synopsis	Destination IPv6 address of the aggregate route
Context	configure <i>service vpn service-name ipsec security-policy number entry number</i> remote-ipv6 address ipv6-prefix
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

any boolean

Synopsis	Use any IP address
Context	configure <i>service vpn service-name ipsec security-policy number entry number</i> remote-ipv6 any boolean
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>service-name</i> ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn <i>service-name</i> ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure service vprn <i>service-name</i> ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stale-time *number*

Synopsis	Neighbor discovery cache entry stale time
Context	configure service vprn <i>service-name</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535
Default	14400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-advertisement

Synopsis	Enter the router-advertisement context
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement
Tree	router-advertisement
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns-options

Synopsis	Enable the dns-options context
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement dns-options
Tree	dns-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rdnss-lifetime (*keyword* | *number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement dns-options rdnss-lifetime (<i>keyword</i> <i>number</i>)
Tree	rdnss-lifetime
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0 4 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv6-address*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement dns-options server <i>ipv6-address</i>

Tree	server
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [\[ip-int-name\]](#) *reference*

Synopsis	Enter the interface list instance
Context	configure service vpn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-int-name] *reference*

Synopsis	VPN interface name
Context	configure service vpn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i>
Tree	interface
Reference	configure service vpn <i>service-name</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of router advertisement
Context	configure service vpn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

current-hop-limit *number*

Synopsis	Hop limit advertised in RA messages
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns-options

Synopsis	Enable the dns-options context
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> dns-options
Tree	dns-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> dns-options include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> dns-options rdnss-lifetime (<i>number</i> <i>keyword</i>)
Tree	rdnss-lifetime

Range	0 4 to 3600
Units	seconds
Options	infinite
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server *ipv6-address*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface reference dns-options server <i>ipv6-address</i>
Tree	server
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

managed-configuration *boolean*

Synopsis	Set the managed address configuration flag
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface reference managed-configuration <i>boolean</i>
Tree	managed-configuration
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-advertisement-interval *number*

Synopsis	Maximum time between sending advertisement messages
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface reference max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	4 to 1800
Units	seconds

Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

min-advertisement-interval *number*

Synopsis	Minimum interval between router advertisement messages
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	3 to 1350
Units	seconds
Default	200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu *number*

Synopsis	MTU for sending packets to the router
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> mtu <i>number</i>
Tree	mtu
Range	1280 to 9800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nd-router-preference *keyword*

Synopsis	Default router preference for Router Advertisements
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> nd-router-preference <i>keyword</i>
Tree	nd-router-preference
Description	<p>This command configures the default router preference for Router Advertisements (RAs) and allows IPv6 hosts to discover and select a default gateway address by listening to RAs.</p> <p>This feature provides basic traffic engineering functionality for host devices. When this command is applied, the router advertises the respective router preference to the</p>

connected host to assist in its selection of the most appropriate default gateway on a link.

This extension is backward compatible, both for routers (setting the router preference bits) and hosts (interpreting the router preference bits). These bits are ignored by hosts that do not implement the RFC 4191 functionality by configuring this command. Similarly, hosts that do not implement the RFC 4191 functionality interpret the values sent by devices that do not implement the RFC 4191 extension as a medium preference.

Options	medium, high, low
Default	medium
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ipv6-prefix](#)] *ipv6-prefix*

Synopsis	Enter the prefix list instance
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> prefix <i>ipv6-prefix</i>
Tree	prefix
Max. instances	254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-prefix*

Synopsis	IPv6 address prefix
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Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> <i>prefix ipv6-prefix</i>
Tree	<i>prefix</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

autonomous *boolean*

Synopsis	Set the autonomous flag value
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> <i>prefix ipv6-prefix autonomous</i> <i>boolean</i>
Tree	<i>autonomous</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

on-link *boolean*

Synopsis	Use prefix for on-link determination
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> <i>prefix ipv6-prefix on-link</i> <i>boolean</i>
Tree	<i>on-link</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preferred-lifetime (*keyword* | *number*)

Synopsis	Remaining time that the prefix remains preferred
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> <i>prefix ipv6-prefix preferred-lifetime</i> (<i>keyword</i> <i>number</i>)
Tree	<i>preferred-lifetime</i>
Range	0 to 4294967294
Units	seconds
Options	infinite

Default	604800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

valid-lifetime (*keyword* | *number*)

Synopsis	Remaining time in which the prefix is still valid
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> prefix ipv6-prefix valid-lifetime (<i>keyword</i> <i>number</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reachable-time *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-time *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface <i>reference</i> retransmit-time <i>number</i>
Tree	retransmit-time
Range	0 to 1800000

Units	milliseconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-lifetime *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface reference router-lifetime <i>number</i>
Tree	router-lifetime
Range	0 4 to 9000
Units	seconds
Default	1800
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-virtual-mac *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	configure service vprn <i>service-name</i> ipv6 router-advertisement interface reference use-virtual-mac <i>boolean</i>
Tree	use-virtual-mac
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

isis [[isis-instance](#)] *number*

Synopsis	Enter the isis list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i>
Tree	isis
Description	Commands in this context create or configure the IS-IS protocol instance in the VPRN.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[isis-instance] *number*

Synopsis	IS-IS instance ID
Context	configure service vpn <i>service-name</i> isis <i>number</i>
Tree	isis
Range	0 to 127
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

additional-system-id *system-id-no-default*

Synopsis	Additional system ID
Context	configure service vpn <i>service-name</i> isis <i>number</i> additional-system-id <i>system-id-no-default</i>
Tree	additional-system-id
String length	14
String format	'system-id-no-default' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Max. instances	4
Notes	This element is ordered by the user.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IS-IS instance
Context	configure service vpn <i>service-name</i> isis <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-passive-only *boolean*

Synopsis	Advertise prefixes that belong to passive interfaces
Context	configure service vpn <i>service-name</i> isis <i>number</i> advertise-passive-only <i>boolean</i>
Tree	advertise-passive-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *keyword*

Synopsis	Router capabilities advertisement to neighbors
Context	configure service vpn <i>service-name</i> isis <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	area, as
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-l1isis *mac-address*

Synopsis	Destination MAC address for all L1 IS-IS routers
Context	configure service vpn <i>service-name</i> isis <i>number</i> all-l1isis <i>mac-address</i>
Tree	all-l1isis
Default	01:80:C2:00:00:14
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

all-l2isis *mac-address*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	configure service vpn <i>service-name</i> isis <i>number</i> all-l2isis <i>mac-address</i>
Tree	all-l2isis
Default	01:80:C2:00:00:15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-address *area-address*

Synopsis	Area address portion of the NSAP address
Context	configure service vprn <i>service-name</i> isis <i>number</i> area-address <i>area-address</i>
Tree	area-address
String length	2 to 38
String format	'area-address' must match NSAP area-address hex pattern (length 2..38)
Max. instances	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-check *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	configure service vprn <i>service-name</i> isis <i>number</i> authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	configure service vprn <i>service-name</i> isis <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the authentication key to verify PDUs sent from neighbors in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure service vprn <i>service-name</i> isis <i>number</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type
Context	configure service vprn <i>service-name</i> isis <i>number</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	configure service vprn <i>service-name</i> isis <i>number</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

csnp-on-p2p *boolean*

Synopsis	Send periodic CSNP PDUs on point-to-point interfaces
Context	configure service vprn <i>service-name</i> isis <i>number</i> csnp-on-p2p <i>boolean</i>
Tree	csnp-on-p2p
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-route-tag *number*

Synopsis	Route tag for the default route
Context	configure service vprn <i>service-name</i> isis <i>number</i> default-route-tag <i>number</i>
Tree	default-route-tag
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn <i>service-name</i> isis <i>number</i> export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn <i>service-name</i> isis <i>number</i> export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn <i>service-name</i> isis <i>number</i> export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure service vpn <i>service-name</i> isis <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-flooding

Synopsis	Enter the fast-flooding context
Context	configure service vpn <i>service-name</i> isis <i>number</i> fast-flooding
Tree	fast-flooding
Description	Commands in this context configure IS-IS fast flooding, as specified in RFC 9681. The configuration applies to interfaces that belong to the instance unless it is overridden under an interface.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-receiver

Synopsis	Enable the lsp-receiver context
Context	configure service vpn <i>service-name</i> isis <i>number</i> fast-flooding lsp-receiver
Tree	lsp-receiver

Description	Commands in this context configure how the router receives LSPs and how it acknowledges them. The router can also advertise its flooding values to neighbors.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

advertise-flooding-tlv *boolean*

Synopsis	Enable the advertise-flooding-tlv context
Context	configure service vprn <i>service-name</i> isis number fast-flooding lsp-receiver advertise-flooding-tlv <i>boolean</i>
Tree	advertise-flooding-tlv
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Maximum number of LSPs receivable without an intervening delay
Context	configure service vprn <i>service-name</i> isis number fast-flooding lsp-receiver burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Number of received LSPs that triggers the immediate sending of a PSNP
Context	configure service vprn <i>service-name</i> isis number fast-flooding lsp-receiver lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Interval between LSP transmissions that can be sustained on reception
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding lsp-receiver lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

psnp-interval *number*

Synopsis	Interval between periodic transmissions of Partial Sequence Number PDUs (PSNPs)
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding lsp-receiver psnp-interval <i>number</i>
Tree	psnp-interval
Range	50 to 1000
Units	milliseconds
Default	200
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-window *number*

Synopsis	Maximum receive window
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding lsp-receiver receive-window <i>number</i>
Tree	receive-window
Range	10 to 1000
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

Isp-sender

Synopsis	Enable the Isp-sender context
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding Isp-sender
Tree	Isp-sender
Description	Commands in this context configure how the router transmits LSPs. The sender can use flooding values received from a neighbor, PSNP acknowledgments, and locally configured defaults to control the number and rate of transmitted LSPs.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-burst-size *boolean*

Synopsis	Enforce to not exceed the advertised LSP burst size
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding Isp-sender enforce-burst-size <i>boolean</i>
Tree	enforce-burst-size
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-receive-window *boolean*

Synopsis	Enforce the advertised receive window
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding Isp-sender enforce-receive-window <i>boolean</i>
Tree	enforce-receive-window
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

local-defaults

Synopsis	Enter the local-defaults context
Context	configure service vprn <i>service-name</i> isis <i>number</i> fast-flooding Isp-sender local-defaults
Tree	local-defaults

Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Default burst size
Context	configure service vprn service-name isis number fast-flooding lsp-sender local-defaults burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Default number of LSPs per PSNP
Context	configure service vprn service-name isis number fast-flooding lsp-sender local-defaults lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Default interval between LSP transmissions
Context	configure service vprn service-name isis number fast-flooding lsp-sender local-defaults lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	26.10.R1

Platforms 7705 SAR Gen 2

receive-window *number*

Synopsis Default receive window.

Context **configure** [service vprn](#) *service-name* [isis number](#) [fast-flooding](#) [lsp-sender](#) [local-defaults](#) [receive-window](#) *number*

Tree [receive-window](#)

Range 10 to 1000

Default 30

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

graceful-restart

Synopsis Enable the **graceful-restart** context

Context **configure** [service vprn](#) *service-name* [isis number](#) [graceful-restart](#)

Tree [graceful-restart](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

helper-mode *boolean*

Synopsis Enable the Graceful Restart helper for IS-IS

Context **configure** [service vprn](#) *service-name* [isis number](#) [graceful-restart](#) [helper-mode](#) *boolean*

Tree [helper-mode](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets

Context **configure** [service vprn](#) *service-name* [isis number](#) [hello-authentication](#) *boolean*

Tree [hello-authentication](#)

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	IS-IS Hello message padding
Context	configure service vprn <i>service-name</i> isis <i>number</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-attached-bit *boolean*

Synopsis	Ignore attached bit on received Layer 1 LSPs
Context	configure service vprn <i>service-name</i> isis <i>number</i> ignore-attached-bit <i>boolean</i>
Tree	ignore-attached-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-lsp-errors *boolean*

Synopsis	Ignore LSP packets with errors
Context	configure service vprn <i>service-name</i> isis <i>number</i> ignore-lsp-errors <i>boolean</i>
Tree	ignore-lsp-errors
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-narrow-metric *boolean*

Synopsis	Ignore links with narrow metrics
Context	configure service vprn <i>service-name</i> isis <i>number</i> ignore-narrow-metric <i>boolean</i>

Tree	ignore-narrow-metric
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

iid-tlv *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> iid-tlv <i>boolean</i>
Tree	iid-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure service vprn <i>service-name</i> isis <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enable the ipv4 context
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Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv4 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> bfd-liveness ipv6 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

conditional-advertise-prefix *reference*

Synopsis	Policy to conditionally advertise interface prefixes
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> conditional-advertise-prefix <i>reference</i>
Tree	conditional-advertise-prefix
Description	<p>This command specifies the policy that allows IS-IS, OSPF, and OSPFv3 to selectively advertise system or loopback interface prefixes (including associated SIDs and SRv6 locators) only when conditions defined in the route policy are met.</p> <p>The route policy evaluates the presence or absence of specific routes in the routing table, typically using constructs like route-exists. If the policy evaluates to accept, the interface prefix is advertised; if not, the prefix is suppressed.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> csnp-interval <i>number</i>
Tree	csnp-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-instance *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> default-instance <i>boolean</i>
Tree	default-instance
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fast-flooding

Synopsis	Enter the fast-flooding context
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding
Tree	fast-flooding
Description	Commands in this context configure IS-IS fast flooding for the interface, as specified in RFC 9681. Values configured in this context override the corresponding instance-level configuration.
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-receiver

Synopsis	Enter the lsp-receiver context
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver
Tree	lsp-receiver
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LSP receiver
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

advertise-flooding-tlv *boolean*

Synopsis	Enable the advertise-flooding-tlv context
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver advertise-flooding-tlv <i>boolean</i>
Tree	advertise-flooding-tlv

Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Maximum number of LSPs receivable without an intervening delay
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Number of received LSPs that triggers the immediate sending of a PSNP
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Interval between LSP transmissions that can be sustained on reception
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-receiver lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100

Introduced	26.10.R1
Platforms	7705 SAR Gen 2

psnp-interval *number*

Synopsis	Interval between periodic transmissions of Partial Sequence Number PDUs (PSNPs)
Context	configure service vprn service-name isis number interface interface-name fast-flooding lsp-receiver psnp-interval <i>number</i>
Tree	psnp-interval
Range	50 to 1000
Units	milliseconds
Default	200
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

receive-window *number*

Synopsis	Maximum receive window
Context	configure service vprn service-name isis number interface interface-name fast-flooding lsp-receiver receive-window <i>number</i>
Tree	receive-window
Range	10 to 1000
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-sender

Synopsis	Enter the lsp-sender context
Context	configure service vprn service-name isis number interface interface-name fast-flooding lsp-sender
Tree	lsp-sender
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LSP sender
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-burst-size *boolean*

Synopsis	Enforce to not exceed the advertised LSP burst size
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender enforce-burst-size <i>boolean</i>
Tree	enforce-burst-size
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

enforce-receive-window *boolean*

Synopsis	Enforce the advertised receive window
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender enforce-receive-window <i>boolean</i>
Tree	enforce-receive-window
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

local-defaults

Synopsis	Enter the local-defaults context
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults
Tree	local-defaults

Introduced	26.10.R1
Platforms	7705 SAR Gen 2

burst-size *number*

Synopsis	Default burst size
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults burst-size <i>number</i>
Tree	burst-size
Range	1 to 200
Default	30
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-per-psnp *number*

Synopsis	Default number of LSPs per PSNP
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults lsp-per-psnp <i>number</i>
Tree	lsp-per-psnp
Range	1 to 90
Default	15
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

lsp-transmit-interval *number*

Synopsis	Default interval between LSP transmissions
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> fast-flooding lsp-sender local-defaults lsp-transmit-interval <i>number</i>
Tree	lsp-transmit-interval
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	26.10.R1

Platforms 7705 SAR Gen 2

receive-window *number*

Synopsis Default receive window.

Context **configure** [service vprn](#) *service-name* [isis number](#) [interface interface-name](#) [fast-flooding lsp-sender local-defaults](#) [receive-window number](#)

Tree [receive-window](#)

Range 10 to 1000

Default 30

Introduced 26.10.R1

Platforms 7705 SAR Gen 2

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets

Context **configure** [service vprn](#) *service-name* [isis number](#) [interface interface-name](#) [hello-authentication boolean](#)

Tree [hello-authentication](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-authentication-key *encrypted-leaf*

Synopsis Authentication key or hash string for Hello PDUs

Context **configure** [service vprn](#) *service-name* [isis number](#) [interface interface-name](#) [hello-authentication-key encrypted-leaf](#)

Tree [hello-authentication-key](#)

Description This command specifies the authentication key or hash string for Hello PDUs in a protected format.

The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 422

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-type *keyword*

Synopsis	Hello authentication type
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> interface-type <i>keyword</i>
Tree	interface-type

Options	point-to-point, broadcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> ipv4-multicast <i>boolean</i>
Tree	ipv4-multicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> ipv6-unicast <i>boolean</i>
Tree	ipv6-unicast
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i>
Tree	level
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-number] keyword

Synopsis	ISIS protocol level number
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-key *encrypted-leaf*

Synopsis	Authentication key for Hello PDUs
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-authentication-key <i>encrypted-leaf</i>
Tree	hello-authentication-key
Description	<p>This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.</p> <p>If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

hello-authentication-type *keyword*

Synopsis Hello authentication enabled on the context

Context **configure** [service vprn](#) [service-name isis](#) [number](#) [interface](#) [interface-name](#) [level](#)
keyword [hello-authentication-type](#) *keyword*

Tree [hello-authentication-type](#)

Description This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello **authentication-key** statement must also be included.

Options password, message-digest

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-interval *number*

Synopsis Interval between Hello messages sent on this level

Context **configure** [service vprn](#) [service-name isis](#) [number](#) [interface](#) [interface-name](#) [level](#)
keyword [hello-interval](#) *number*

Tree [hello-interval](#)

Range 1 to 20000

Units seconds

Default 9

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-multiplier *number*

Synopsis Hello messages missed from neighbor before router declares adjacency down

Context **configure** [service vprn](#) [service-name isis](#) [number](#) [interface](#) [interface-name](#) [level](#)
keyword [hello-multiplier](#) *number*

Tree [hello-multiplier](#)

Range 2 to 100

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hello-padding *keyword*

Synopsis Padding on IS-IS Hello packets

Context **configure** [service vprn](#) *service-name* [isis](#) *number* [interface](#) *interface-name* [level](#)
keyword [hello-padding](#) *keyword*

Tree [hello-padding](#)

Options adaptive, loose, strict, none

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4-multicast-metric *number*

Synopsis IS-IS interface metric applied for IPv4 multicast

Context **configure** [service vprn](#) *service-name* [isis](#) *number* [interface](#) *interface-name* [level](#)
keyword [ipv4-multicast-metric](#) *number*

Tree [ipv4-multicast-metric](#)

Range 1 to 16777215

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv6-unicast-metric *number*

Synopsis IS-IS interface metric applied for IPv6 unicast

Context **configure** [service vprn](#) *service-name* [isis](#) *number* [interface](#) *interface-name* [level](#)
keyword [ipv6-unicast-metric](#) *number*

Tree [ipv6-unicast-metric](#)

Range 1 to 16777215

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

metric *number*

Synopsis IS-IS interface metric applied for IPv4 unicast

Context **configure** [service vprn](#) *service-name* [isis](#) *number* [interface](#) *interface-name* [level](#)
keyword [metric](#) *number*

Tree	metric
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Passive interface
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Router to become the designated router on a multi-access network
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> priority <i>number</i>
Tree	priority
Range	0 to 127
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sd-offset *number*

Synopsis	Value of the signal degrade offset
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> sd-offset <i>number</i>
Tree	sd-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sf-offset *number*

Synopsis	Value of the signal fail offset
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level <i>keyword</i> sf-offset <i>number</i>
Tree	sf-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level-capability *keyword*

Synopsis	IS-IS levels for this interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load balancing weight
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Max. range	0 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate

Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Exclude Loopfree Alternative at the interface level
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map

Synopsis	Enable the policy-map context
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-pacing-interval *number*

Synopsis	Interval for sending LSPs from interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> lsp-pacing-interval <i>number</i>
Tree	lsp-pacing-interval
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mesh-group

Synopsis	Enable the mesh-group context
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> mesh-group
Tree	mesh-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blocked

Synopsis	Prevent the interface from flooding LSPs
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> mesh-group blocked
Tree	blocked
Notes	The following elements are part of a choice: blocked or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Mesh group for the interface
Context	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> mesh-group value <i>number</i>
Tree	value

Range	1 to 2000000000
Notes	The following elements are part of a choice: blocked or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Passive interface
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 65535
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Route tag for IP address of interface
Context	configure service vpn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast-routing *keyword*

Synopsis	IS-IS topology for IPv4 multicast routing
Context	configure service vprn <i>service-name</i> isis <i>number</i> ipv4-multicast-routing <i>keyword</i>
Tree	ipv4-multicast-routing
Options	false, native, mt
Default	native
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-routing *boolean*

Synopsis	Support IPv4 routing for IS-IS instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> ipv4-routing <i>boolean</i>
Tree	ipv4-routing
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-routing *keyword*

Synopsis	Routing topology for IPv6
Context	configure service vprn <i>service-name</i> isis <i>number</i> ipv6-routing <i>keyword</i>
Tree	ipv6-routing
Options	false, native, mt
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i>
Tree	level

Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-number] keyword

Synopsis	ISIS protocol level number
Context	configure service vpn <i>service-name</i> isis <i>number</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability boolean

Synopsis	Allow router advertisement capabilities
Context	configure service vpn <i>service-name</i> isis <i>number</i> level <i>keyword</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key encrypted-leaf

Synopsis	Authentication key to verify PDUs sent on the interface
Context	configure service vpn <i>service-name</i> isis <i>number</i> level <i>keyword</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.</p> <p>Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The authentication-type command must also be included.</p>

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	1 to 422
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure service vpn <i>service-name</i> isis <i>number</i> level <i>keyword</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure service vpn <i>service-name</i> isis <i>number</i> level <i>keyword</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	configure service vpn <i>service-name</i> isis <i>number</i> level <i>keyword</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-ipv4-multicast-metric *number*

Synopsis	Default metric for IPv4 unicast
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> default-ipv4-multicast-metric <i>number</i>
Tree	default-ipv4-multicast-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-ipv6-unicast-metric *number*

Synopsis	Default metric for IPv6 unicast
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> default-ipv6-unicast-metric <i>number</i>
Tree	default-ipv6-unicast-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-metric *number*

Synopsis	Default metric
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777215
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-preference *number*

Synopsis	External route preference for IS-IS level
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Context	configure service vpn <i>service-name isis number level keyword external-preference number</i>
Tree	external-preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure service vpn <i>service-name isis number level keyword hello-authentication boolean</i>
Tree	hello-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure service vpn <i>service-name isis number level keyword hello-padding keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	configure service vpn <i>service-name isis number level keyword loopfree-alternate-exclude boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-mtu-size *number*

Synopsis	LSP MTU size
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> lsp-mtu-size <i>number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	External route preference at level
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	configure service vprn <i>service-name</i> isis <i>number</i> level <i>keyword</i> wide-metrics-only <i>boolean</i>

Tree	wide-metrics-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level-capability *keyword*

Synopsis	Routing level for instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

link-group [[link-group-name](#)] *named-item*

Synopsis	Enter the link-group list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i>
Tree	link-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[link-group-name] *named-item*

Synopsis	Link group name for the IS-IS protocol
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i>
Tree	link-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> description <i>very-long-description</i>
Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i>
Tree	level
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast-metric-offset *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> ipv4-multicast-metric-offset <i>number</i>

Tree	ipv4-multicast-metric-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-unicast-metric-offset *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> ipv4-unicast-metric-offset <i>number</i>
Tree	ipv4-unicast-metric-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast-metric-offset *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> ipv6-unicast-metric-offset <i>number</i>
Tree	ipv6-unicast-metric-offset
Range	1 to 16777215
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

member [[interface-name](#)] *reference*

Synopsis	Add a list entry for member
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> member <i>reference</i>
Tree	member
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] reference

Synopsis	Interface name for the associated link group
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> member <i>reference</i>
Tree	member
Reference	configure service vprn <i>service-name</i> isis <i>number</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

oper-members *number*

Synopsis	Minimum number of operational links
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> oper-members <i>number</i>
Tree	oper-members
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	configure service vprn <i>service-name</i> isis <i>number</i> link-group <i>named-item</i> level <i>keyword</i> revert-members <i>number</i>
Tree	revert-members
Range	1 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure service vprn <i>service-name</i> isis <i>number</i> loopfree-alternate

Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude

Synopsis	Enter the exclude context
Context	configure service vpn <i>service-name</i> isis <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure service vpn <i>service-name</i> isis <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-lifetime *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	configure service vpn <i>service-name</i> isis <i>number</i> lsp-lifetime <i>number</i>

Tree	lsp-lifetime
Range	350 to 65535
Units	seconds
Default	1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-minimum-remaining-lifetime *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	configure service vprn <i>service-name</i> isis <i>number</i> lsp-minimum-remaining-lifetime <i>number</i>
Tree	lsp-minimum-remaining-lifetime
Range	350 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-mtu-size *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP MTU size
Context	configure service vprn <i>service-name</i> isis <i>number</i> lsp-mtu-size <i>number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Units	bytes
Default	1492
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-refresh

Synopsis	Enter the lsp-refresh context
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Context	configure service vprn <i>service-name isis number lsp-refresh</i>
Tree	lsp-refresh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	configure service vprn <i>service-name isis number lsp-refresh half-lifetime boolean</i>
Tree	half-lifetime
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Refresh timer interval
Context	configure service vprn <i>service-name isis number lsp-refresh interval number</i>
Tree	interval
Range	150 to 65535
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multi-part-tlv

Synopsis	Enter the multi-part-tlv context
Context	configure service vprn <i>service-name isis number multi-part-tlv</i>
Tree	multi-part-tlv
Description	Commands in this context configure the behavior of the MP-TLV capability.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

neighbor *boolean*

Synopsis	Enable origination of multi-part neighbor TLVs
Context	configure service vprn service-name isis number multi-part-tlv neighbor <i>boolean</i>
Tree	neighbor
Description	<p>When configured to true, the router splits neighbor TLVs (TLV 22 and TLV 222) that exceed the maximum size into MP-TLVs of the same type and key.</p> <p>When configured to false, the router truncates neighbor TLVs to fit the maximum size limit.</p>
Default	true
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

srlg *boolean*

Synopsis	Enable origination of multi-part SRLG TLVs
Context	configure service vprn service-name isis number multi-part-tlv srlg <i>boolean</i>
Tree	srlg
Description	<p>When configured to true, the router splits SRLG TLVs (TLV 138 and TLV 238) that exceed the maximum size into MP-TLVs of the same type and key.</p> <p>When configured to false, the router truncates SRLG TLVs to fit the maximum size limit.</p>
Default	true
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

multi-topology

Synopsis	Enable the multi-topology context
Context	configure service vprn service-name isis number multi-topology
Tree	multi-topology
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
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Context	configure service vprn <i>service-name isis number multi-topology ipv4-multicast boolean</i>
Tree	ipv4-multicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	configure service vprn <i>service-name isis number multi-topology ipv6-unicast boolean</i>
Tree	ipv6-unicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-import

Synopsis	Enter the multicast-import context
Context	configure service vprn <i>service-name isis number multicast-import</i>
Tree	multicast-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	configure service vprn <i>service-name isis number multicast-import ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload

Synopsis	Enable the overload context
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Context	configure service vprn <i>service-name isis number overload</i>
Tree	overload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure service vprn <i>service-name isis number overload max-metric boolean</i>
Tree	max-metric
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	configure service vprn <i>service-name isis number overload-export-external boolean</i>
Tree	overload-export-external
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	configure service vprn <i>service-name isis number overload-export-interlevel boolean</i>
Tree	overload-export-interlevel
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-fib-error-notify-only

Synopsis	Enable the overload-fib-error-notify-only context
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Context	configure <i>service vprn service-name isis number overload-fib-error-notify-only</i>
Tree	<i>overload-fib-error-notify-only</i>
Description	<p>Commands in this context configure the IS-IS router to send a notification when an overload condition occurs while programming the FIB, instead of advertising the overload condition of the router in the IS-IS LSP.</p> <p>Note: Nokia recommends being careful using this command. When you configure the router not to advertise the IS-IS overload state in the IS-IS LSP, other routers are not instructed to take the overloaded router out of the IS-IS forwarding topology and this will cause suboptimal forwarding and non-deterministic behavior on the overloaded router. To avoid changing the default IS-IS overflow behavior, leave this command disabled.</p> <p>When this command is configured, the IS-IS router enters a suboptimal state where it sends only a notification trap; transit traffic can still use the router in this state.</p> <p>The IS-IS router tracks the segment routing prefix SIDs where FIB programming failed. With the retry command configured, the router retries programming the segment routing prefix SIDs in the FIB using this tracked information.</p> <p>When this command is not configured, during normal operation, the system may force the router to enter an overload state because of a lack of FIB resources. In this state, the router is used to terminate traffic and is not used to transit traffic.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry *number*

Synopsis	Time to retry programming failed entries in the FIB
Context	configure <i>service vprn service-name isis number overload-fib-error-notify-only retry number</i>
Tree	<i>retry</i>
Description	<p>This command configures the time the router uses to retry programming the failed entries in the FIB.</p> <p>The overload-fib-error-notify-only command must be configured to use the retry timer. The removal of the overload-fib-error-notify-only configuration causes the system to program the failed entries in the FIB by triggering an immediate SPF.</p>
Range	10 to 1800
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure service vprn service-name isis number overload-on-boot
Tree	overload-on-boot
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure service vprn service-name isis number overload-on-boot max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	configure service vprn service-name isis number overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
Context	configure service vprn service-name isis number poi-tlv <i>boolean</i>
Tree	poi-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	configure service vprn <i>service-name</i> isis <i>number</i> prefix-attributes-tlv <i>boolean</i>
Tree	prefix-attributes-tlv
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-limit

Synopsis	Enable the prefix-limit context
Context	configure service vprn <i>service-name</i> isis <i>number</i> prefix-limit
Tree	prefix-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> prefix-limit limit <i>number</i>
Tree	limit
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	configure service vprn <i>service-name</i> isis <i>number</i> prefix-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

overload-timeout (*number* | *keyword*)

Synopsis	Time in overload state when prefix limit is reached
Context	configure service vprn <i>service-name</i> isis <i>number</i> prefix-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

warning-threshold *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	configure service vprn <i>service-name</i> isis <i>number</i> prefix-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

psnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	configure service vprn <i>service-name</i> isis <i>number</i> psnp-authentication <i>boolean</i>
Tree	psnp-authentication
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-bandwidth *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	configure service vprn <i>service-name</i> isis <i>number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority

Synopsis	Enter the rib-priority context
Context	configure service vprn <i>service-name</i> isis <i>number</i> rib-priority
Tree	rib-priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure service vprn <i>service-name</i> isis <i>number</i> rib-priority high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	configure service vprn <i>service-name</i> isis <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>named-item-64</i>
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

tag *number*

Synopsis Tag value that is used to match IS-IS routes

Context **configure** *service* *vpn* *service-name* *isis* *number* *rib-priority* *high* **tag** *number*

Tree *tag*

Range 1 to 4294967295

Notes The following elements are part of a choice: **prefix-list** or **tag**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-id *router-id*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Unique router ID for the ISIS instance

Context **configure** *service* *vpn* *service-name* *isis* *number* **router-id** *router-id*

Tree *router-id*

String format 'ipv4-address' must use only digits and dots (no %zone)
 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

standard-multi-instance *boolean*

Synopsis Enable RFC standards compliant multi-instance behavior

Context **configure** *service* *vpn* *service-name* *isis* *number* **standard-multi-instance** *boolean*

Tree *standard-multi-instance*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

strict-adjacency-check *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	configure service vprn <i>service-name</i> isis <i>number</i> strict-adjacency-check <i>boolean</i>
Tree	strict-adjacency-check
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summary-address [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the summary-address list instance
Context	configure service vprn <i>service-name</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the summary address
Context	configure service vprn <i>service-name</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

level-capability *keyword*

Synopsis	IS-IS level for the summary address
Context	configure service vprn <i>service-name</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) level-capability <i>keyword</i>
Tree	level-capability
Options	1, 2, 1/2
Default	1/2

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	configure service vpn <i>service-name</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-tag <i>number</i>
Tree	route-tag
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-attached-bit *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	configure service vpn <i>service-name</i> isis <i>number</i> suppress-attached-bit <i>boolean</i>
Tree	suppress-attached-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *system-id*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	configure service vpn <i>service-name</i> isis <i>number</i> system-id <i>system-id</i>
Tree	system-id
String length	14
String format	'system-id' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Default	0000.0000.0000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enter the timers context
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-wait

Synopsis	Enter the lsp-wait context
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers lsp-wait
Tree	lsp-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-initial-wait *number*

Synopsis	Initial LSP generation delay
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers lsp-wait lsp-initial-wait <i>number</i>
Tree	lsp-initial-wait
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-max-wait *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers lsp-wait lsp-max-wait <i>number</i>
Tree	lsp-max-wait
Range	10 to 120000
Units	milliseconds
Default	5000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

`lsp-second-wait` *number*

Synopsis	Delay between first and second LSP generation
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers lsp-wait lsp-second-wait <i>number</i>
Tree	lsp-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

`spf-wait`

Synopsis	Enter the spf-wait context
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

`spf-initial-wait` *number*

Synopsis	Initial SPF calculation delay after topology change
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	configure service vprn <i>service-name</i> isis <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-import

Synopsis	Enter the unicast-import context
Context	configure service vprn <i>service-name</i> isis <i>number</i> unicast-import
Tree	unicast-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Submit IPv4 routes into unicast RTM
Context	configure service vprn <i>service-name</i> isis <i>number</i> unicast-import ipv4 <i>boolean</i>

Tree	ipv4
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Submit IPv6 routes into unicast RTM
Context	configure service vprn <i>service-name</i> isis <i>number</i> unicast-import ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

label-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation mode for VPRN service labels
Context	configure service vprn <i>service-name</i> label-mode <i>keyword</i>
Tree	label-mode
Options	vrf, next-hop
Default	vrf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-routes-domain-id *domain-id*

Synopsis	Local routes domain ID
Context	configure service vprn <i>service-name</i> local-routes-domain-id <i>domain-id</i>
Tree	local-routes-domain-id
Description	This command specifies the domain ID that is used in the D-PATH attribute for local routes before those routes are exported to a BGP neighbor using BGP-IPVPN, EVPN-IFF, EVPN-IFL, or PE-CE BGP. A local route is a non-BGP route installed in the VPRN route table and learned using static route or an IGP.

The domain IDs are used in the D-PATH attribute, in accordance with draft-ietf-bess-evpn-ipvpn-interworking. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN IFL and BGP IPVPN).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

String format 'domain-id' must be global-field:local-field (uint32:uint16 range)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

log

Synopsis Enter the **log** context
 Context **configure** [service vprn](#) *service-name* **log**
 Tree [log](#)
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

filter [[filter-name](#)] *log-filter-name*

Synopsis Enter the **filter** list instance
 Context **configure** [service vprn](#) *service-name* **log filter** *log-filter-name*
 Tree [filter](#)
 Max. 1500
 instances
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[\[filter-name\]](#) *log-filter-name*

Synopsis Filter ID
 Context **configure** [service vprn](#) *service-name* **log filter** *log-filter-name*
 Tree [filter](#)
 String length 1 to 64
 String format 'log-filter-name' must be numeric 1..1500 or alphanumeric not starting with underscore and without trailing spaces

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Default action for the event filter
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> default-action <i>keyword</i>
Tree	default-action
Options	drop, forward
Default	forward
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

named-entry [[entry-name](#)] *log-filter-entry-name*

Synopsis	Enter the named-entry list instance
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i>
Tree	named-entry
Description	Commands in this context create or edit an event filter entry.
Max. instances	999
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[entry-name] *log-filter-entry-name*

Synopsis Entry name

Context **configure** [service vprn](#) *service-name* **log filter** *log-filter-name* [named-entry](#) *log-filter-entry-name*

Tree [named-entry](#)

String length 1 to 64

String format 'log-filter-entry-name' must be numeric 1..999 or alphanumeric not starting with underscore and without trailing spaces

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

action *keyword*

Synopsis Action for this event filter entry

Context **configure** [service vprn](#) *service-name* **log filter** *log-filter-name* [named-entry](#) *log-filter-entry-name* [action](#) *keyword*

Tree [action](#)

Options drop, forward

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description

Context **configure** [service vprn](#) *service-name* **log filter** *log-filter-name* [named-entry](#) *log-filter-entry-name* [description](#) *description*

Tree [description](#)

String length 1 to 80

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match
Tree	match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

application

Synopsis	Enter the application context
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match application
Tree	application
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq keyword

Synopsis	Application to match
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match application eq keyword
Tree	eq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpaht, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq keyword

Synopsis	Application to be filtered out
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match application neq <i>keyword</i>
Tree	neq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event

Synopsis	Enter the event context
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event
Tree	event
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Log event message to match
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event eq <i>number</i>
Tree	eq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Number of the log event to match
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event gt <i>number</i>
Tree	gt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gte number

Synopsis	Number of the log event to match
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event gte <i>number</i>
Tree	gte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Number of the log event to match
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event lt <i>number</i>
Tree	lt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lte number

Synopsis	Number of the log event to match
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Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event lte <i>number</i>
Tree	lte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq *number*

Synopsis	Log event message to filter out
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match event neq <i>number</i>
Tree	neq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message

Synopsis	Enter the message context
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match message
Tree	message
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *string*

Synopsis	Log event message to match
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match message eq <i>string</i>
Tree	eq
String length	1 to 400
Notes	The following elements are part of a choice: eq or neq .

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

neq string

Synopsis Log event message to be filtered out
Context **configure** [service vprn](#) [service-name](#) [log filter](#) [log-filter-name](#) [named-entry](#) [log-filter-entry-name](#) [match message neq string](#)
Tree [neq](#)
String length 1 to 400
Notes The following elements are part of a choice: **eq** or **neq**.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

regexp boolean

Synopsis String comparison to determine if the log event matches the value of pattern
Context **configure** [service vprn](#) [service-name](#) [log filter](#) [log-filter-name](#) [named-entry](#) [log-filter-entry-name](#) [match message regexp boolean](#)
Tree [regexp](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

severity

Synopsis Enter the **severity** context
Context **configure** [service vprn](#) [service-name](#) [log filter](#) [log-filter-name](#) [named-entry](#) [log-filter-entry-name](#) [match severity](#)
Tree [severity](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

eq keyword

Synopsis Log event severity level to match

Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity eq <i>keyword</i>
Tree	eq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt keyword

Synopsis	Log event severity level
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity gt <i>keyword</i>
Tree	gt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gte keyword

Synopsis	Log event severity level
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity gte <i>keyword</i>
Tree	gte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt keyword

Synopsis	Log event severity level
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity lt <i>keyword</i>
Tree	lt

Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lte keyword

Synopsis	Log event severity level
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity lte <i>keyword</i>
Tree	lte
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq keyword

Synopsis	Log event severity level to filter out
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match severity neq <i>keyword</i>
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subject

Synopsis	Enter the subject context
Context	configure service vpn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject
Tree	subject
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq *named-item*

Synopsis	Log event subject string to match
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject eq <i>named-item</i>
Tree	eq
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neq *named-item*

Synopsis	Log event subject string to filter out
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject neq <i>named-item</i>
Tree	neq
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: eq or neq .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

regexp *boolean*

Synopsis	String comparison to determine if the log event matches the value of subject
Context	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i> named-entry <i>log-filter-entry-name</i> match subject regexp <i>boolean</i>
Tree	regexp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-id [[name](#)] *li-log-name*

Synopsis	Enter the log-id list instance
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i>
Tree	log-id
Max. instances	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *li-log-name*

Synopsis	Log ID
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i>
Tree	log-id
String length	1 to 64
String format	'li-log-name' must be numeric 1..100 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the log
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination

Synopsis	Enter the destination context
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i> destination
Tree	destination
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf

Synopsis	Enable the netconf context
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i> destination netconf
Tree	netconf
Notes	The following elements are part of a choice: netconf , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the NETCONF log
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i> destination netconf max-entries <i>number</i>
Tree	max-entries
Range	50 to 3000
Default	100

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp

Synopsis	Enable the snmp context
Context	configure service vprn <i>service-name</i> log log-id li-log-name destination snmp
Tree	snmp
Notes	The following elements are part of a choice: netconf , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-entries *number*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the memory log
Context	configure service vprn <i>service-name</i> log log-id li-log-name destination snmp max-entries <i>number</i>
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

syslog *reference*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Index with the information to format event messages sent to a specific SYSLOG collector
Context	configure service vprn <i>service-name</i> log log-id li-log-name destination syslog <i>reference</i>
Tree	syslog

Reference	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i>
Notes	The following elements are part of a choice: netconf , snmp , or syslog .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter *reference*

Synopsis	Event filter policy with the log destination
Context	configure service vprn <i>service-name</i> log log-id li-log-name filter <i>reference</i>
Tree	filter
Reference	configure service vprn <i>service-name</i> log filter <i>log-filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf-stream *named-item*

Synopsis	Destination NETCONF stream name
Context	configure service vprn <i>service-name</i> log log-id li-log-name netconf-stream <i>named-item</i>
Tree	netconf-stream
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source

Synopsis	Enter the source context
Context	configure service vprn <i>service-name</i> log log-id li-log-name source
Tree	source
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

change *boolean*

Synopsis	Collect log events from the change event stream
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Context	configure service vprn <i>service-name</i> log log-id li-log-name source change <i>boolean</i>
Tree	change
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

debug *boolean*

Synopsis	Collect log events from the debug event stream
Context	configure service vprn <i>service-name</i> log log-id li-log-name source debug <i>boolean</i>
Tree	debug
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

main *boolean*

Synopsis	Collect log events from the main event stream
Context	configure service vprn <i>service-name</i> log log-id li-log-name source main <i>boolean</i>
Tree	main
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security *boolean*

Synopsis	Collect log events from the security event stream
Context	configure service vprn <i>service-name</i> log log-id li-log-name source security <i>boolean</i>
Tree	security
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time-format *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	configure service vprn <i>service-name</i> log log-id <i>li-log-name</i> time-format <i>keyword</i>
Tree	time-format
Options	utc, local
Default	utc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp-trap-group [[log-name](#)] *svc-vprn-snmp-trap-group-name*

Synopsis	Enter the snmp-trap-group list instance
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i>
Tree	snmp-trap-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[log-name] *svc-vprn-snmp-trap-group-name*

Synopsis	Log ID
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i>
Tree	snmp-trap-group
String length	1 to 17
String format	'svc-vprn-snmp-trap-group-name' must be numeric 1..100 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trap-target [*name*] *string*

Synopsis	Enter the trap-target list instance
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> trap-target <i>string</i>
Tree	trap-target
Max. instances	25
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *string*

Synopsis	Trap target name
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> trap-target <i>string</i>
Tree	trap-target
String length	1 to 28
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the trap receiver
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> trap-target <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> trap-target <i>string</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

notify-community *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> trap-target <i>string</i> notify-community <i>string</i>
Tree	notify-community
String length	1 to 31
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	configure service vprn <i>service-name</i> log snmp-trap-group <i>svc-vprn-snmp-trap-group-name</i> trap-target <i>string</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	162
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

replay *boolean*

Synopsis Retransmit missed notifications

Context **configure** [service vprn](#) *service-name* [log snmp-trap-group](#) *svc-vprn-snmp-trap-group-name* [trap-target](#) *string* **replay** *boolean*

Tree [replay](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

security-level *keyword*

Synopsis Security level at which SNMP notification messages are sent to SNMP notification collector

Context **configure** [service vprn](#) *service-name* [log snmp-trap-group](#) *svc-vprn-snmp-trap-group-name* [trap-target](#) *string* **security-level** *keyword*

Tree [security-level](#)

Options no-auth-no-privacy, auth-no-privacy, privacy

Default no-auth-no-privacy

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

version *keyword*

Synopsis SNMP version to format notification messages sent to this SNMP notification collector

Context **configure** [service vprn](#) *service-name* [log snmp-trap-group](#) *svc-vprn-snmp-trap-group-name* [trap-target](#) *string* **version** *keyword*

Tree [version](#)

Options snmpv1, snmpv2c, snmpv3

Default snmpv3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

syslog [[syslog-name](#)] *log-vprn-syslog-name*

Synopsis	Enter the syslog list instance
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i>
Tree	syslog
Max. instances	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[syslog-name] *log-vprn-syslog-name*

Synopsis	Syslog name
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i>
Tree	syslog
String length	1 to 64
String format	'log-vprn-syslog-name' must be numeric 1..30 or alphanumeric not starting with underscore and without trailing spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	IP address or FQDN of the Syslog target host
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>)
Tree	address
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure service vpn <i>service-name</i> log syslog <i>log-vpn-syslog-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

facility *keyword*

Synopsis	Facility code for messages
Context	configure service vpn <i>service-name</i> log syslog <i>log-vpn-syslog-name</i> facility <i>keyword</i>
Tree	facility
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hostname

Synopsis	Enter the hostname context
Context	configure service vpn <i>service-name</i> log syslog <i>log-vpn-syslog-name</i> hostname
Tree	hostname
Description	<p>Commands in this context control how the HOSTNAME field of syslog messages is populated.</p> <p>If no command option is configured, the HOSTNAME is populated with an IP address.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-system-name

Synopsis	Enable the use-system-name context
Context	configure service vpn <i>service-name</i> log syslog <i>log-vpn-syslog-name</i> hostname use-system-name
Tree	use-system-name

Description	Commands in this context configure the system to use the system name configured with the configure system name command as the HOSTNAME field of syslog messages. Do not use any spaces in the system name if it is used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: use-system-name , use-vprn-name , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-vprn-name

Synopsis	Enable the use-vprn-name context
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i> hostname use-vprn-name
Tree	use-vprn-name
Description	Commands in this context configure the system to use the VPRN service name configured with the configure service vprn service-name command as the HOSTNAME field of syslog messages sent in this VPRN. Do not use any spaces in the VPRN name if it is used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: use-system-name , use-vprn-name , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *named-item-255*

Synopsis	Syslog HOSTNAME field value
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i> hostname value named-item-255
Tree	value
Description	This command configures a string as the HOSTNAME field of syslog messages. Do not use any spaces in the string used for the syslog HOSTNAME.
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: use-system-name , use-vprn-name , or value .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-prefix (*keyword* | *string*)

Synopsis	Prefix string to log message sent to target syslog host
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i> log-prefix (<i>keyword</i> <i>string</i>)
Tree	log-prefix
String length	1 to 32
String format	'log-prefix' must contain only printable characters between 33 and 126 ASCII except '.' and '='
Options	no-prefix
Default	TMNX
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	Destination port when sending syslog over UDP
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	514
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-version *keyword*

Synopsis	Version of the syslog protocol to use
Context	configure service vprn <i>service-name</i> log syslog <i>log-vprn-syslog-name</i> protocol-version <i>keyword</i>
Tree	protocol-version
Description	<p>This command configures the version of the syslog protocol to use for sending syslog messages to a collector.</p> <p>The timestamp-format command is ignored when this command is configured to rfc5424.</p>
Options	rfc3164, rfc5424
Default	rfc3164

Introduced 26.10.R1
 Platforms 7705 SAR Gen 2

severity *keyword*

Synopsis Severity level threshold for the syslog message
 Context **configure** [service vprn](#) *service-name* [log syslog](#) *log-vprn-syslog-name* [severity](#) *keyword*
 Tree [severity](#)
 Options emergency, alert, critical, error, warning, notice, info, debug
 Default info
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

timestamp-format *keyword*

Synopsis Syslog timestamp format
 Context **configure** [service vprn](#) *service-name* [log syslog](#) *log-vprn-syslog-name* [timestamp-format](#) *keyword*
 Tree [timestamp-format](#)
 Options millisecond – Set timestamp format to milliseconds
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

tls-client-profile *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis TLS client profile used to encrypt syslog communication
 Context **configure** [service vprn](#) *service-name* [log syslog](#) *log-vprn-syslog-name* [tls-client-profile](#) *reference*
 Tree [tls-client-profile](#)
 Description This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.
 Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.

When this command is unconfigured, the syslog messages are sent over UDP.

Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management

Synopsis	Enable the management context
Context	configure service vprn <i>service-name</i> management
Tree	management
Description	Commands in this context control which management protocols can be used to access the SR OS router via the VPRN router instance. For SNMP control, see the configure service vprn snmp access command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ftp *boolean*

Synopsis	Allow access to the FTP server
Context	configure service vprn <i>service-name</i> management allow-ftp <i>boolean</i>
Tree	allow-ftp
Description	When configured to true , this command allows FTP access to the SR OS router via the VPRN router instance. When configured to false , this command disallows access to the SR OS FTP server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	configure service vprn <i>service-name</i> management allow-grpc <i>boolean</i>
Tree	allow-grpc
Description	When configured to true , this command allows access to the gRPC server via the VPRN router instance. When configured to false , this command disallows gRPC server access.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-netconf *boolean*

Synopsis	Allow access to the NETCONF server
Context	configure service vprn <i>service-name</i> management allow-netconf <i>boolean</i>
Tree	allow-netconf
Description	When configured to true , this command allows NETCONF server access to the SR OS router via the VPRN router instance. When configured to false , this command disallows access to the NETCONF server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ssh *boolean*

Synopsis	Allow access to the SSH server
Context	configure service vprn <i>service-name</i> management allow-ssh <i>boolean</i>
Tree	allow-ssh
Description	When configured to true , this command allows SSH server access to the SR OS router via the VPRN router instance. When configured to false , this command disallows SSH server access.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-telnet *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	configure service vprn <i>service-name</i> management allow-telnet <i>boolean</i>
Tree	allow-telnet
Description	When configured to true , this command allows IPv4 Telnet server access to the SR OS router via the VPRN router instance.

	When configured to false , this command disallows access to the IPv4 Telnet server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-telnet6 *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	configure service vprn <i>service-name</i> management allow-telnet6 <i>boolean</i>
Tree	allow-telnet6
Description	When configured to true , this command allows IPv6 Telnet server access to the SR OS router via the VPRN router instance. When configured to false , this command removes access to the IPv6 Telnet server.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-ipv4-routes

Synopsis	Enter the maximum-ipv4-routes context
Context	configure service vprn <i>service-name</i> maximum-ipv4-routes
Tree	maximum-ipv4-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	configure service vprn <i>service-name</i> maximum-ipv4-routes log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	configure service vprn <i>service-name</i> maximum-ipv4-routes threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	configure service vprn <i>service-name</i> maximum-ipv4-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-ipv6-routes

Synopsis	Enter the maximum-ipv6-routes context
Context	configure service vprn <i>service-name</i> maximum-ipv6-routes
Tree	maximum-ipv6-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	configure service vprn <i>service-name</i> maximum-ipv6-routes log-only <i>boolean</i>
Tree	log-only

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	configure service vprn <i>service-name</i> maximum-ipv6-routes threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	configure service vprn <i>service-name</i> maximum-ipv6-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-maximum-routes

Synopsis	Enter the mc-maximum-routes context
Context	configure service vprn <i>service-name</i> mc-maximum-routes
Tree	mc-maximum-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Log and allow learning of new multicast routes
Context	configure service vprn <i>service-name</i> mc-maximum-routes log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	configure service vprn <i>service-name</i> mc-maximum-routes threshold <i>number</i>
Tree	threshold
Range	1 to 100
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	configure service vprn <i>service-name</i> mc-maximum-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mld

Synopsis	Enable the mld context
Context	configure service vprn <i>service-name</i> mld
Tree	mld
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	configure service vpn <i>service-name</i> mld admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-if-query-source-address *ipv6-unicast-or-linklocal-address*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	configure service vpn <i>service-name</i> mld group-if-query-source-address <i>ipv6-unicast-or-linklocal-address</i>
Tree	group-if-query-source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[ip-interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

maximum-number-groups *number*

Synopsis Maximum number of groups for this interface

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [maximum-number-groups](#) *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [maximum-number-sources](#) *number*

Tree [maximum-number-sources](#)

Range 1 to 1000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

query-interval *number*

Synopsis Time between two consecutive host-query messages

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [query-interval](#) *number*

Tree [query-interval](#)

Range 2 to 1024

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

query-last-member-interval *number*

Synopsis Time between group-specific query messages

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [query-last-member-interval](#) *number*

Tree	query-last-member-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> ssm-translate
Tree	ssm-translate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address*

Synopsis	Enter the group-range list instance
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Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv6-multicast-address*

Synopsis	Lower bound of the group range
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv6-multicast-address*

Synopsis	Upper bound of the group range
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [*source-address*] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] ipv6-unicast-address

Synopsis	Source IP address
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [group-address] ipv6-multicast-address

Synopsis	Enter the group list instance
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i>
Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-address] ipv6-multicast-address

Synopsis	Group address of multicast channel
Context	configure service vpn <i>service-name</i> mld interface <i>interface-name</i> static group <i>ipv6-multicast-address</i>
Tree	group
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

source [\[source-address\]](#) *ipv6-unicast-address*

Synopsis Add a list entry for **source**

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [static group](#) *ipv6-multicast-address* [source](#) *ipv6-unicast-address*

Tree [source](#)

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis Source IP address

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [static group](#) *ipv6-multicast-address* [source](#) *ipv6-unicast-address*

Tree [source](#)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

starg

Synopsis any source address (*,G)

Context **configure** [service vprn](#) *service-name* [mld interface](#) *interface-name* [static group](#) *ipv6-multicast-address* [starg](#)

Tree [starg](#)

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-range [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address* [step](#) *ipv6-address*

Synopsis Enter the **group-range** list instance

Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv6-multicast-address*

Synopsis	Lower bound of the static multicast group
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv6-multicast-address*

Synopsis	Upper bound of the static multicast group
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

step *ipv6-address*

Synopsis	Step interval for the group-range addresses
Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> static group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> step <i>ipv6-address</i>
Tree	group-range
MD-CLI default	::1
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

source [source-address] *ipv6-unicast-address*

Synopsis Add a list entry for **source**

Context **configure** *service vprn* *service-name* *mld interface interface-name* *static group-range* *start ipv6-multicast-address* *end ipv6-multicast-address* *step ipv6-address* **source** *ipv6-unicast-address*

Tree **source**

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis Source IP address

Context **configure** *service vprn* *service-name* *mld interface interface-name* *static group-range* *start ipv6-multicast-address* *end ipv6-multicast-address* *step ipv6-address* **source** *ipv6-unicast-address*

Tree **source**

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

starg

Synopsis any source address (*,G)

Context **configure** *service vprn* *service-name* *mld interface interface-name* *static group-range* *start ipv6-multicast-address* *end ipv6-multicast-address* *step ipv6-address* **starg**

Tree **starg**

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

version *keyword*

Synopsis MLD protocol version

Context	configure service vprn <i>service-name</i> mld interface <i>interface-name</i> version <i>keyword</i>
Tree	version
Options	1, 2
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure service vprn <i>service-name</i> mld query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Units	seconds
Default	125
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure service vprn <i>service-name</i> mld query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure service vprn <i>service-name</i> mld query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023

Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure service vprn <i>service-name</i> mld robust-count <i>number</i>
Tree	robust-count
Range	2 to 10
Default	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure service vprn <i>service-name</i> mld ssm-translate
Tree	ssm-translate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [start](#) *ipv6-multicast-address* [end](#) *ipv6-multicast-address*

Synopsis	Enter the group-range list instance
Context	configure service vprn <i>service-name</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *ipv6-multicast-address*

Synopsis	Lower bound of the group range
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Context	configure service vprn <i>service-name</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *ipv6-multicast-address*

Synopsis	Upper bound of the group range
Context	configure service vprn <i>service-name</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source [[source-address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for source
Context	configure service vprn <i>service-name</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[source-address] *ipv6-unicast-address*

Synopsis	Source IP address
Context	configure service vprn <i>service-name</i> mld ssm-translate group-range start <i>ipv6-multicast-address</i> end <i>ipv6-multicast-address</i> source <i>ipv6-unicast-address</i>
Tree	source
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

mss-adjust

Synopsis Enable the **mss-adjust** context

Context **configure** [service vprn](#) *service-name* **mss-adjust**

Tree [mss-adjust](#)

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis NAT group used for TCP-MSS adjustment

Context **configure** [service vprn](#) *service-name* **mss-adjust** [nat-group](#) *number*

Tree [nat-group](#)

Max. range 0 to 4294967295

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

segment-size *number*

Synopsis TCP-MSS option value in transmitted TCP SYN requests

Context **configure** [service vprn](#) *service-name* **mss-adjust** [segment-size](#) *number*

Tree [segment-size](#)

Range 160 to 10240

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mvpn

Synopsis	Enter the mvpn context
Context	configure service vprn <i>service-name</i> mvpn
Tree	mvpn
Description	Commands in this context configure MVPN-related command options for IP VPN.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-discovery

Synopsis	Enter the auto-discovery context
Context	configure service vprn <i>service-name</i> mvpn auto-discovery
Tree	auto-discovery
Description	Commands in this context enable MVPN membership auto-discovery through BGP. When auto-discovery is enabled, PIM peering on the inclusive provider tunnel is disabled. The VPRN instance must be administratively disabled to change the auto-discovery configuration.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address *ipv4-address*

 **WARNING:**
This element is deprecated and will be removed in a future release.

Synopsis	IPv4 source address
Context	configure service vprn <i>service-name</i> mvpn auto-discovery source-address <i>ipv4-address</i>
Tree	source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Default	0.0.0.0
Introduced	25.3.R2
Deprecated	26.10.R1
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Status of multicast VPN membership auto-discovery
Context	configure service vpn <i>service-name</i> mvpn auto-discovery type <i>keyword</i>
Tree	type
Options	bgp, mdt-safi
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

c-mcast-signaling keyword

Synopsis	Protocol for PE-to-PE signaling of CE multicast states
Context	configure service vpn <i>service-name</i> mvpn c-mcast-signaling <i>keyword</i>
Tree	c-mcast-signaling
Options	bgp, pim
Default	pim
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

intersite-shared

Synopsis	Enter the intersite-shared context
Context	configure service vpn <i>service-name</i> mvpn intersite-shared
Tree	intersite-shared
Description	Commands in this context configure whether to use inter-site shared C-trees. Optional parameters allow enabling additional intersite shared functionality. Not specifying an optional parameter when executing the command disables that parameter.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of inter-site shared C-trees use
Context	configure service vpn <i>service-name</i> mvpn intersite-shared admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kat-type5-advertisement-withdraw *boolean*

Synopsis	Enable KATs on source PEs for ng-MVPN deployments
Context	configure service vpn <i>service-name</i> mvpn intersite-shared kat-type5-advertisement-withdraw <i>boolean</i>
Tree	kat-type5-advertisement-withdraw
Description	When configured to true , this command specifies that the MVPN Type-5 “Source Active AD routes” are not removed even if all receivers are removed from the tree.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

persistent-type5-advertisement *boolean*

Synopsis	Ensure Type-5 S-A routes are generated for MCAST source
Context	configure service vpn <i>service-name</i> mvpn intersite-shared persistent-type5-advertisement <i>boolean</i>
Tree	persistent-type5-advertisement
Description	When configured to true , this command removes the MVPN Type-5 “Source Active AD routes” even if receivers are present but the keepalive timer (KAT) has timed out because of no traffic.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mdt-type *keyword*

Synopsis	MVPN instance type per PE node
Context	configure service vpn <i>service-name</i> mvpn mdt-type <i>keyword</i>
Tree	mdt-type
Options	sender-only, receiver-only, sender-receiver

Default	sender-receiver
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

provider-tunnel

Synopsis	Enter the provider-tunnel context
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel
Tree	provider-tunnel
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inclusive

Synopsis	Enter the inclusive context
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel inclusive
Tree	inclusive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsr keyword

Synopsis	BSR signaling type
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel inclusive bsr <i>keyword</i>
Tree	bsr
Options	unicast, spmsi
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enable the pim context
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel inclusive pim
Tree	pim
Notes	The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp .

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM use for provider tunnels
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel inclusive pim admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address *ipv4-multicast-address*

Synopsis	Multicast group address
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel inclusive pim group-address ipv4-multicast-address
Tree	group-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are transmitted
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel inclusive pim hello-interval number
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

hello-multiplier *number*

Synopsis Multiplier to determine the holdtime for a PIM neighbor

Context **configure** [service vprn](#) *service-name* [mvpn provider-tunnel inclusive pim](#) [hello-multiplier number](#)

Tree [hello-multiplier](#)

Range 20 to 100

Default 35

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

improved-assert *boolean*

Synopsis Enable the improved assert procedure

Context **configure** [service vprn](#) *service-name* [mvpn provider-tunnel inclusive pim](#) [improved-assert boolean](#)

Tree [improved-assert](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis PIM mode for the inclusive provider tunnel

Context **configure** [service vprn](#) *service-name* [mvpn provider-tunnel inclusive pim](#) [mode keyword](#)

Tree [mode](#)

Options asm, ssm

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

three-way-hello *boolean*

Synopsis Enable PIM three-way hello

Context	configure service vprn <i>service-name mvpn provider-tunnel inclusive pim three-way-hello</i> <i>boolean</i>
Tree	three-way-hello
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tracking-support *boolean*

Synopsis	Enable the T bit in the LAN Prune Delay option
Context	configure service vprn <i>service-name mvpn provider-tunnel inclusive pim tracking-support</i> <i>boolean</i>
Tree	tracking-support
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-ipmsi *boolean*

Synopsis	Suppress advertisement of I-PMSI
Context	configure service vprn <i>service-name mvpn provider-tunnel inclusive suppress-ipmsi</i> <i>boolean</i>
Tree	suppress-ipmsi
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

wildcard-spmsi *boolean*

Synopsis	Enable RFC 6625 S-PMSI functionality for NG-MVPN
Context	configure service vprn <i>service-name mvpn provider-tunnel inclusive wildcard-spmsi</i> <i>boolean</i>
Tree	wildcard-spmsi
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

selective

Synopsis	Enter the selective context
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel selective
Tree	selective
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asm-mdt *boolean*

Synopsis	Enable Data MDT with PIM-ASM mode on receiver PE node
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel selective asm-mdt <i>boolean</i>
Tree	asm-mdt
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-discovery *boolean*

Synopsis	Enable C-trees to P-tunnel binding auto-discovery
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel selective auto-discovery <i>boolean</i>
Tree	auto-discovery
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

data-delay-interval *number*

Synopsis	Interval a PE switches from inclusive to selective
Context	configure service vprn <i>service-name</i> mvpn provider-tunnel selective data-delay-interval <i>number</i>
Tree	data-delay-interval
Range	3 to 180
Default	3

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

data-threshold

Synopsis	Enter the data-threshold context
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective data-threshold
Tree	data-threshold
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the group-prefix list instance
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pe-threshold-add *number*

Synopsis	PE add threshold
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-add <i>number</i>
Tree	pe-threshold-add

Range	1 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pe-threshold-delete *number*

Synopsis	PE delete threshold
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-delete <i>number</i>
Tree	pe-threshold-delete
Range	2 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold *number*

Synopsis	S-PMSI threshold
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold <i>number</i>
Tree	threshold
Range	0 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

join-tlv-packing *boolean*

Synopsis	Enable packing of MDT join TLVs into a single PDU
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective join-tlv-packing <i>boolean</i>
Tree	join-tlv-packing
Default	true

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multistream-spmsi [[multistream-id](#)] *number*

Synopsis	Enter the multistream-spmsi list instance
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i>
Tree	multistream-spmsi
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[multistream-id] *number*

Synopsis	Multistream spmsi id
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i>
Tree	multistream-spmsi
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of multi-stream S-PMSI
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [source-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for group-prefix
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 unicast source address and prefix
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsp-template *reference*

Synopsis	RSVP-TE LSP template for S-PMSI
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> lsp-template <i>reference</i>
Tree	lsp-template

Reference	configure router <i>named-item-64</i> mpls lsp-template <i>named-item</i>
Notes	The following elements are part of a choice: lsp-template , p2mp-sr , or pim .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enable the pim context
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> pim
Tree	pim
Notes	The following elements are part of a choice: lsp-template , p2mp-sr , or pim .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-address *ipv4-multicast-address*

Synopsis	Group address of the data MDT
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> pim group-address <i>ipv4-multicast-address</i>
Tree	group-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id) 'ipv4-multicast-address' must be in 224.0.0.0-239.255.255.255 range with valid dotted-quad form
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	PIM mode for the selective provider tunnel
Context	configure service vpn <i>service-name</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> pim mode <i>keyword</i>
Tree	mode
Options	asm, ssm
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pim

Synopsis Enable the **pim** context

Context **configure** [service vpn](#) *service-name* [mvpn](#) [provider-tunnel](#) [selective](#) [pim](#)

Tree [pim](#)

Notes The following elements are part of a choice: **bier**, **mldp**, **p2mp-sr**, **pim**, or **rsvp**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-prefix *ipv4-multicast-prefix*

Synopsis Multicast group address and netmask length

Context **configure** [service vpn](#) *service-name* [mvpn](#) [provider-tunnel](#) [selective](#) [pim](#) [group-prefix](#) *ipv4-multicast-prefix*

Tree [group-prefix](#)

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis PIM mode

Context **configure** [service vpn](#) *service-name* [mvpn](#) [provider-tunnel](#) [selective](#) [pim](#) [mode](#) *keyword*

Tree [mode](#)

Options asm, ssm

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

redundant-source-list

Synopsis Enter the **redundant-source-list** context

Context **configure** [service vpn](#) *service-name* [mvpn](#) [redundant-source-list](#)

Tree	redundant-source-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for source-prefix
Context	configure service vprn <i>service-name</i> mvpn redundant-source-list source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	source-prefix
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Unicast address prefix and mask
Context	configure service vprn <i>service-name</i> mvpn redundant-source-list source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	source-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpf-select

Synopsis	Enter the rpf-select context
Context	configure service vprn <i>service-name</i> mvpn rpf-select
Tree	rpf-select
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

core-mvpn [[core-mvpn-service-name](#)] *reference*

Synopsis	Enter the core-mvpn list instance
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Context	configure service vpn <i>service-name</i> mvpn rpf-select core-mvpn <i>reference</i>
Tree	core-mvpn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[core-mvpn-service-name] reference

Synopsis	Core MVPN service name
Context	configure service vpn <i>service-name</i> mvpn rpf-select core-mvpn <i>reference</i>
Tree	core-mvpn
Reference	configure service vpn <i>service-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-prefix [\[ip-group-prefix\]](#) *ipv4-multicast-prefix*

Synopsis	Enter the group-prefix list instance
Context	configure service vpn <i>service-name</i> mvpn rpf-select core-mvpn <i>reference</i> group-prefix <i>ipv4-multicast-prefix</i>
Tree	group-prefix
Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-group-prefix] *ipv4-multicast-prefix*

Synopsis	IPv4 multicast address prefix and mask
Context	configure service vpn <i>service-name</i> mvpn rpf-select core-mvpn <i>reference</i> group-prefix <i>ipv4-multicast-prefix</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

starg *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starg flag
Context	configure service vprn <i>service-name</i> mvpn rpf-select core-mvpn reference group-prefix ipv4-multicast-prefix starg <i>boolean</i>
Tree	starg
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

umh-pe-backup

Synopsis	Enter the umh-pe-backup context
Context	configure service vprn <i>service-name</i> mvpn umh-pe-backup
Tree	umh-pe-backup
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

umh-pe [[ip-address](#)] *ipv4-unicast-address*

Synopsis	Enter the umh-pe list instance
Context	configure service vprn <i>service-name</i> mvpn umh-pe-backup umh-pe <i>ipv4-unicast-address</i>
Tree	umh-pe
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] *ipv4-unicast-address*

Synopsis	IP address for the standby PE
Context	configure service vprn <i>service-name</i> mvpn umh-pe-backup umh-pe <i>ipv4-unicast-address</i>
Tree	umh-pe

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby *ipv4-unicast-address*

Synopsis	IP address
Context	configure service vprn <i>service-name</i> mvpn umh-pe-backup umh-pe <i>ipv4-unicast-address</i> standby <i>ipv4-unicast-address</i>
Tree	standby
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

umh-selection *keyword*

Synopsis	UMH selection mechanism
Context	configure service vprn <i>service-name</i> mvpn umh-selection <i>keyword</i>
Tree	umh-selection
Options	highest-ip, hash-based, tunnel-status, unicast-rt-pref
Default	highest-ip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-export

Synopsis	Enter the vrf-export context
Context	configure service vprn <i>service-name</i> mvpn vrf-export
Tree	vrf-export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure service vprn <i>service-name</i> mvpn vrf-export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes.
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	The following elements are part of a choice: policy or unicast . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast *boolean*

Synopsis	Enable the unicast VRF export policy for the MVPN
Context	configure service vprn <i>service-name</i> mvpn vrf-export unicast <i>boolean</i>
Tree	unicast
Default	false
Notes	The following elements are part of a choice: policy or unicast .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-import

Synopsis	Enter the vrf-import context
Context	configure service vprn <i>service-name</i> mvpn vrf-import
Tree	vrf-import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>mvpn</i> <i>vrf-import</i> policy (<i>policy-expr-string</i> <i>string</i>)
Tree	<i>policy</i>
Description	This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes.
String length	1 to 255
String format	'policy-expr-string' must contain [for a bracketed policy name in a routing policy logical expression (e.g. [policyA])
Max. instances	15
Min. instances	1
Notes	The following elements are part of a choice: policy or unicast . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast *boolean*

Synopsis	Enable the unicast VRF import policy for the MVPN
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>mvpn</i> <i>vrf-import</i> unicast <i>boolean</i>
Tree	<i>unicast</i>
Default	false
Notes	The following elements are part of a choice: policy or unicast .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vrf-target

Synopsis	Enter the vrf-target context
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>mvpn</i> vrf-target
Tree	<i>vrf-target</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *route-target*

Synopsis	Extended community name for the MVPN
Context	configure service vpn <i>service-name</i> mvpn vrf-target community <i>route-target</i>
Tree	community
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export

Synopsis	Enter the export context
Context	configure service vpn <i>service-name</i> mvpn vrf-target export
Tree	export
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *route-target*

Synopsis	Extended community name for the MVPN
Context	configure service vpn <i>service-name</i> mvpn vrf-target export community <i>route-target</i>
Tree	community
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast *boolean*

Synopsis	Enable the unicast vrf-target for the MVPN
Context	configure service vpn <i>service-name</i> mvpn vrf-target export unicast <i>boolean</i>
Tree	unicast
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enter the import context
Context	configure service vpn <i>service-name</i> mvpn vrf-target import
Tree	import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *route-target*

Synopsis	Extended community name for the MVPN
Context	configure service vpn <i>service-name</i> mvpn vrf-target import community <i>route-target</i>
Tree	community
String length	10 to 28
String format	'route-target-32' must be target:(IPv4:comm AS pairs IEEE MAC) per ext-community rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast *boolean*

Synopsis	Enable the unicast vrf-target for the MVPN
Context	configure service vpn <i>service-name</i> mvpn vrf-target import unicast <i>boolean</i>
Tree	unicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast *boolean*

Synopsis	Enable unicast vrf-target for the MVPN
Context	configure service vpn <i>service-name</i> mvpn vrf-target unicast <i>boolean</i>

Tree	unicast
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat

Synopsis	Enable the nat context
Context	configure service vprn <i>service-name</i> nat
Tree	nat
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

inside

Synopsis	Enter the inside context
Context	configure service vprn <i>service-name</i> nat inside
Tree	inside
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

large-scale

Synopsis	Enter the large-scale context
Context	configure service vprn <i>service-name</i> nat inside large-scale
Tree	large-scale
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy *reference*



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name for LSN
Context	configure service vprn <i>service-name</i> nat inside large-scale nat-policy <i>reference</i>

Tree	nat-policy
Reference	configure service nat nat-policy <i>external-named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat44

Synopsis	Enter the nat44 context
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44
Tree	nat44
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

destination-prefix [[ip-prefix-length](#)] *ipv4-unicast-prefix*

Synopsis	Enter the destination-prefix list instance
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 destination-prefix <i>ipv4-unicast-prefix</i>
Tree	destination-prefix
Max. instances	6144
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[\[ip-prefix-length\]](#) *ipv4-unicast-prefix*

Synopsis	IP prefix for the destination address
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 destination-prefix <i>ipv4-unicast-prefix</i>
Tree	destination-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy reference

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 destination-prefix ipv4-unicast-prefix nat-policy reference
Tree	nat-policy
Reference	configure service nat nat-policy <i>external-named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

deterministic

Synopsis	Enter the deterministic context
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic
Tree	deterministic
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-map [\[from\] ipv4-address to ipv4-address nat-policy reference](#)

Synopsis	Enter the address-map list instance
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic address-map ipv4-address to ipv4-address nat-policy reference
Tree	address-map
Description	<p>Commands in this context map inside IPv4 addresses of deterministic NAT44 subscribers to the outside IPv4 addresses in a NAT pool.</p> <p>This context is only applicable to deterministic NAT44 with a single ESA-VM in a NAT-group. The number of subscribers per outside IPv4 address is flexible and not restricted to a discrete range governed by the 2^n rule.</p>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[from] ipv4-address

Synopsis	First IP address of inside IP NAT range
Context	configure service vpn <i>service-name</i> nat inside large-scale nat44 deterministic address-map <i>ipv4-address</i> to ipv4-address nat-policy <i>reference</i>
Tree	address-map
Description	This command specifies the starting IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

to ipv4-address

Synopsis	Ending IP address of inside IP NAT range
Context	configure service vpn <i>service-name</i> nat inside large-scale nat44 deterministic address-map <i>ipv4-address</i> to ipv4-address nat-policy <i>reference</i>
Tree	address-map
Description	This command specifies the ending IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy reference

Synopsis	NAT policy name for LSN
Context	configure service vpn <i>service-name</i> nat inside large-scale nat44 deterministic address-map <i>ipv4-address</i> to ipv4-address nat-policy <i>reference</i>
Tree	address-map
Reference	configure service nat nat-policy <i>external-named-item</i>
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of address map
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic address-map <i>ipv4-address</i> to <i>ipv4-address</i> nat-policy <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

outside-range *ipv4-address*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	First outside IP address in NAT pool
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic address-map <i>ipv4-address</i> to <i>ipv4-address</i> nat-policy <i>reference</i> outside-range <i>ipv4-address</i>
Tree	outside-range
Description	This command specifies the first outside IP address in the NAT pool. The last outside IP address is determined by the number of subscribers mapped to an outside IP address via the configure router nat outside pool large-scale subscriber-limit and configure service vprn nat outside pool large-scale subscriber-limit commands.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

prefix-map [[source-prefix](#)] *ipv4-unicast-prefix* [nat-policy](#) *reference*

Synopsis	Enter the prefix-map list instance
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Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic prefix-map <i>ipv4-unicast-prefix nat-policy reference</i>
Tree	prefix-map
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[source-prefix] *ipv4-unicast-prefix*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic prefix-map <i>ipv4-unicast-prefix nat-policy reference</i>
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-policy *reference*

Synopsis	NAT policy
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic prefix-map <i>ipv4-unicast-prefix nat-policy reference</i>
Tree	prefix-map
Reference	configure service nat nat-policy <i>external-named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic prefix-map <i>ipv4-unicast-prefix nat-policy reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

map [**from**] *ipv4-address* **to** *ipv4-address*

Synopsis Enter the **map** list instance

Context **configure service vpn service-name nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference map ipv4-address to ipv4-address**

Tree **map**

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[from] *ipv4-address*

Synopsis First IP address of inside IP NAT range

Context **configure service vpn service-name nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference map ipv4-address to ipv4-address**

Tree **map**

Description This command specifies the starting IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

to *ipv4-address*

Synopsis Ending IP address of inside IP NAT range

Context **configure service vpn service-name nat inside large-scale nat44 deterministic prefix-map ipv4-unicast-prefix nat-policy reference map ipv4-address to ipv4-address**

Tree **map**

Description This command specifies the ending IPv4 address, IPv6 address, or IPv6 prefix on the inside IP address range.

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

first-outside-address *ipv4-address*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 deterministic prefix-map <i>ipv4-unicast-prefix</i> nat-policy <i>reference</i> map <i>ipv4-address</i> to <i>ipv4-address</i> first-outside-address <i>ipv4-address</i>
Tree	first-outside-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

max-subscriber-limit *number*

**WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Ingress hashing for load distribution across ESA-VMs
Context	configure service vprn <i>service-name</i> nat inside large-scale nat44 max-subscriber-limit <i>number</i>
Tree	max-subscriber-limit
Description	This command configures the maximum number of classic LSN subscribers within a consecutive range of IP addresses that are processed by the same ESA-VM. It directly defines the granularity of upstream traffic distribution across ESA-VMs within the scope of an inside routing context. The ingress hashing mechanism used for traffic distribution is based on source IPv4 addresses or prefixes.
Range	1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768 65536
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

outside

Synopsis	Enter the outside context
Context	configure service vpn <i>service-name</i> nat outside
Tree	outside
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

filters

Synopsis	Enter the filters context
Context	configure service vpn <i>service-name</i> nat outside filters
Tree	filters
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

downstream

Synopsis	Enter the downstream context
Context	configure service vpn <i>service-name</i> nat outside filters downstream
Tree	downstream
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure service vpn <i>service-name</i> nat outside filters downstream ipv4 <i>reference</i>
Tree	ipv4
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

upstream

Synopsis	Enter the upstream context
Context	configure service vprn <i>service-name</i> nat outside filters upstream
Tree	upstream
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ipv4 reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>service-name</i> nat outside filters upstream ipv4 reference
Tree	ipv4
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mtu number

Synopsis	MTU for downstream traffic
Context	configure service vprn <i>service-name</i> nat outside mtu number
Tree	mtu
Range	512 to 9000
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

pool [[name](#)] *named-item*

Synopsis	Enter the pool list instance
Context	configure service vprn <i>service-name</i> nat outside pool named-item
Tree	pool
Max. instances	4096
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[name] *named-item*

Synopsis	NAT pool name
Context	configure <i>service vprn</i> <i>service-name</i> nat outside pool <i>named-item</i>
Tree	<i>pool</i>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

address-range [**start**] *ipv4-unicast-address* **end** *ipv4-unicast-address*

Synopsis	Enter the address-range list instance
Context	configure <i>service vprn</i> <i>service-name</i> nat outside pool <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	<i>address-range</i>
Max. instances	4096
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[start] *ipv4-unicast-address*

Synopsis	Lower bound of the NAT address range
Context	configure <i>service vprn</i> <i>service-name</i> nat outside pool <i>named-item</i> address-range <i>ipv4-unicast-address</i> end <i>ipv4-unicast-address</i>
Tree	<i>address-range</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

end ipv4-unicast-address

Synopsis	Upper bound of the NAT address range
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> address-range ipv4-unicast-address end ipv4-unicast-address
Tree	address-range
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description description

Synopsis	Text description
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> address-range ipv4-unicast-address end ipv4-unicast-address description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

drain boolean

Synopsis	Start or stop draining this NAT address range
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> address-range ipv4-unicast-address end ipv4-unicast-address drain <i>boolean</i>
Tree	drain
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

admin-state keyword

Synopsis	Administrative state of the outside routing NAT pool
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Context	configure service vpn <i>service-name nat outside pool named-item admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

applications

Synopsis	Enter the applications context
Context	configure service vpn <i>service-name nat outside pool named-item applications</i>
Tree	applications
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

agnostic *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
Context	configure service vpn <i>service-name nat outside pool named-item applications agnostic boolean</i>
Tree	agnostic
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

use-interface-ip *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use an IPv4 interface for NAT
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> applications use-interface-ip <i>boolean</i>
Tree	use-interface-ip
Description	When configured to true , the router uses the IPv4 address of a NAT enabled local interface as the public IP address, within the same outside (public) routing context. Only one such NAT'd interface can be defined per outside routing context.
Default	false
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

icmp-echo-reply *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> icmp-echo-reply <i>boolean</i>
Tree	icmp-echo-reply
Description	This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use. In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it. In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.

	In LSN, the reply from an outside IP address is generated regardless if a binding is present.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

large-scale

Synopsis	Enter the large-scale context
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> large-scale
Tree	large-scale
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

subscriber-limit *number*



WARNING:
Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> large-scale subscriber-limit <i>number</i>
Tree	subscriber-limit
Range	1 to 65535 4294967295
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

use-interface-ip

Synopsis	Enter the use-interface-ip context
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> large-scale use-interface-ip
Tree	use-interface-ip
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

cpm-reserved-ports *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per protocol reserved for CPM traffic
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> large-scale use-interface-ip cpm-reserved-ports <i>number</i>
Tree	cpm-reserved-ports
Description	This command configures the router to reserve ports specifically for local (CPM) traffic. On the public IPv4 address of a NAT interface, the ports are shared between CPM traffic and transit traffic passing through the node. This reservation ensures that NAT traffic destined for the local node (CPM traffic) is guaranteed a minimum number of available ports, even if the public IPv4 port pool becomes exhausted.
Range	0 to 65535
Default	10
Introduced	25.7.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

use-well-known-ports *boolean*

Synopsis	Enable dynamic allocation of well-known ports
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> large-scale use-interface-ip use-well-known-ports <i>boolean</i>
Tree	use-well-known-ports
Description	<p>When configured to true, the router configures the dynamic allocation of well-known ports for interface-based NAT.</p> <p>When configured to false, well-known ports are not dynamically allocated for either transit traffic or traffic initiated from the control plane.</p> <p>This command can only be configured when the configure service vprn nat outside pool application use-interface-ip is set to true.</p> <p>Ports within the well-known range (0-1023) can still be allocated statically using static port forwarding.</p>
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> mode <i>keyword</i>
Tree	mode
Options	auto, napt, one-to-one
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

nat-group *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a NAT group
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> nat-group <i>reference</i>
Tree	nat-group
Reference	configure isa nat-group <i>number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-forwarding

Synopsis	Enter the port-forwarding context
Context	configure service vpn <i>service-name</i> nat outside pool <i>named-item</i> port-forwarding

Tree	port-forwarding
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

dynamic-block-reservation *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Reserve dynamic block for subscriber
Context	configure service vprn service-name nat outside pool named-item port-forwarding dynamic-block-reservation <i>boolean</i>
Tree	dynamic-block-reservation
Description	<p>When configured to true, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p> <p>When configured to false, dynamic port blocks are not reserved when the first port forward for the subscriber is created.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

range-end *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
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Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> port-forwarding range-end <i>number</i>
Tree	range-end
Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-start command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If unconfigured, the range-end implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0 1023 to 65535
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-reservation

Synopsis	Enter the port-reservation context
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> port-reservation
Tree	port-reservation
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-blocks *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> port-reservation port-blocks <i>number</i>
Tree	port-blocks
Description	In CGN, this command specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.

For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the **l2-aware port-block-extension** hierarchy in the NAT pool.

Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> port-reservation ports <i>number</i>
Tree	ports
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For Layer 2 aware NAT, this command specifies the size of the initial port block of a subscriber in the pool. Additional port blocks (extended port blocks) for the Layer 2 aware subscriber must be explicitly enabled under the l2-aware port-block-extension hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port blocks.</p> <p>For deterministic pools, the port range begins with zero. However, for non-deterministic pools, the port range begins with one.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

type *keyword*

- **WARNING:**
Modifying this element clears ISA state, such as flow state, for the new value to take effect.
- **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>nat outside pool</i> <i>named-item</i> <i>type</i> <i>keyword</i>
Tree	<i>type</i>
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

watermarks

Synopsis	Enable the watermarks context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>nat outside pool</i> <i>named-item</i> <i>watermarks</i>
Tree	<i>watermarks</i>
Description	This command configures watermarks for NAT resources.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

high *number*

Synopsis	High watermark percentage
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>nat outside pool</i> <i>named-item</i> <i>watermarks</i> <i>high</i> <i>number</i>
Tree	<i>high</i>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

low number

Synopsis	Low watermark percentage
Context	configure service vprn <i>service-name</i> nat outside pool <i>named-item</i> watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

network

Synopsis	Enter the network context
Context	configure service vprn <i>service-name</i> network
Tree	network
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>service-name</i> network ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>service-name</i> network ingress filter
Tree	filter
Description	Commands in this context apply a network ingress filter.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip reference

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>service-name</i> network ingress filter ip reference
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 reference

Synopsis	IPv6 filter policy name
Context	configure service vprn <i>service-name</i> network ingress filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vprn <i>service-name</i> network ingress qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fp-redirect-group *reference*

Synopsis	The forwarding-plane queue group Policy for this VPRN
Context	configure service vprn <i>service-name</i> network ingress qos fp-redirect-group <i>reference</i>
Tree	fp-redirect-group
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instance *number*

Synopsis	Forwarding plane ingress queue group instance
Context	configure service vprn <i>service-name</i> network ingress qos instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-policy *reference*

Synopsis	Network policy name associated with a VPRN
Context	configure service vprn <i>service-name</i> network ingress qos network-policy <i>reference</i>
Tree	network-policy
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-check *boolean*

Synopsis	Enable unicast RPF check of network ingress traffic
Context	configure service vprn <i>service-name</i> network ingress urpf-check <i>boolean</i>
Tree	urpf-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-interface [*interface-name*] *interface-name*

Synopsis	Enter the network-interface list instance
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> network-interface <i>interface-name</i>
Tree	network-interface
Description	Commands in this context configure a network interface in a VPRN that acts as a CSC interface to a CSC-CE in a Carrier Supporting Carrier IP VPN deployment model.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Network interface name
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> network-interface <i>interface-name</i>
Tree	network-interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> network-interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *very-long-description*

Synopsis	Text description
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> network-interface <i>interface-name</i> description <i>very-long-description</i>

Tree	description
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> dist-cpu-protection <i>reference</i>
Tree	dist-cpu-protection
Reference	configure system security dist-cpu-protection policy <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress

Synopsis	Enter the egress context
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> egress
Tree	egress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> egress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip *reference*

Synopsis	IPv4 filter policy name
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Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> egress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-time

Synopsis	Enter the hold-time context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time
Tree	hold-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

down

Synopsis	Enter the down context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time ipv4 down
Tree	down
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time ipv4 down init-only <i>boolean</i>
Tree	init-only
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time ipv4 down seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

up

Synopsis	Enter the up context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time ipv4 up
Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> hold-time ipv4 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress

Synopsis	Enter the ingress context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ingress
Tree	ingress
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

filter

Synopsis	Enter the filter context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ingress filter
Tree	filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ingress filter ip <i>reference</i>
Tree	ip
Reference	configure filter ip-filter <i>filter-name</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets

Context **configure** *service* *vprn* *service-name* *network-interface* *interface-name* **ip-mtu** *number*

Tree *ip-mtu*

Description This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.

Range 512 to 9786

Units bytes

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ipv4

Synopsis Enter the **ipv4** context

Context **configure** *service* *vprn* *service-name* *network-interface* *interface-name* **ipv4**

Tree *ipv4*

Description Commands in this context configure the IPv4 command options for the interface.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

allow-directed-broadcasts *boolean*

Synopsis Accept broadcasts that are directed to this interface

Context **configure** *service* *vprn* *service-name* *network-interface* *interface-name* **ipv4** **allow-directed-broadcasts** *boolean*

Tree *allow-directed-broadcasts*

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bfd

Synopsis Enter the **bfd** context

Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 bfd
Tree	bfd
Description	Commands in this context configure the BFD settings for the associated IP interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier

Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive number

Synopsis	Receive interval
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 bfd receive number
Tree	receive
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmit-interval number

Synopsis	Transmit interval
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 bfd transmit-interval number
Tree	transmit-interval
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp

Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

param-problem

Synopsis	Enter the param-problem context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redirects

Synopsis	Enter the redirects context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp redirects
Tree	redirects
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp redirects admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp redirects number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-expired

Synopsis	Enter the ttl-expired context
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp ttl-expired
Tree	ttl-expired
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp ttl-expired admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of TTL expired messages to send
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp ttl-expired number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time used to limit the number of TTL expired messages
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Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp ttl-expired seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unreachables

Synopsis	Enter the unreachables context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp unreachables
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp unreachables admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp unreachables number <i>number</i>

Tree	number
Range	10 to 2000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 icmp unreachables seconds <i>number</i>
Tree	seconds
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 neighbor-discovery
Tree	neighbor-discovery
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-timer *number*

Synopsis	ARP retry interval
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 neighbor-discovery retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 300
Units	deciseconds
Default	50

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

static-neighbor [*ipv4-address*] *ipv4-address*

Synopsis Enter the **static-neighbor** list instance
Context **configure** *service vprn* *service-name* *network-interface* *interface-name* *ipv4 neighbor-discovery static-neighbor* *ipv4-address*
Tree *static-neighbor*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[ipv4-address] *ipv4-address*

Synopsis IPv4 address that corresponds to the physical address
Context **configure** *service vprn* *service-name* *network-interface* *interface-name* *ipv4 neighbor-discovery static-neighbor* *ipv4-address*
Tree *static-neighbor*
String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mac-address *mac-address*

Synopsis MAC address for the static neighbor
Context **configure** *service vprn* *service-name* *network-interface* *interface-name* *ipv4 neighbor-discovery static-neighbor* *ipv4-address* *mac-address* *mac-address*
Tree *mac-address*
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 neighbor-discovery timeout <i>number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary

Synopsis	Enable the primary context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 primary
Tree	primary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 primary address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 primary broadcast <i>keyword</i>
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary [[address](#)] *ipv4-unicast-address*

Synopsis	Enter the secondary list instance
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>
Tree	secondary
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> ipv4 secondary <i>ipv4-unicast-address</i>

Tree	secondary
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 secondary ipv4-unicast-address broadcast <i>keyword</i>
Tree	broadcast
Options	all-ones, host-ones
Default	host-ones
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 secondary ipv4-unicast-address igp-inhibit <i>boolean</i>
Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 secondary ipv4-unicast-address prefix-length <i>number</i>
Tree	prefix-length

Range	0 to 32
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

urpf-check

Synopsis	Enable the urpf-check context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 urpf-check
Tree	urpf-check
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mode *keyword*

Synopsis	Unicast RPF check mode
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Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> ipv4 urpf-check mode <i>keyword</i>
Tree	mode
Options	strict – Check source address match in RT and interface loose – Check source address match in RT only strict-no-ecmp – Check source address match in ECMP route
Default	strict
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag

Synopsis	Enter the lag context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> lag
Tree	lag
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> load-balancing
Tree	load-balancing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> load-balancing ip-load-balancing <i>keyword</i>
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip

Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> load-balancing lsr-load-balancing <i>keyword</i>
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopback

Synopsis	Use interface as a loopback interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> loopback
Tree	loopback
Notes	The following elements are part of a choice: loopback or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address*

Synopsis	MAC address for the interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> mac <i>mac-unicast-address</i>
Tree	mac
Description	This command assigns a specific MAC address to an IP interface.
String format	'ieeee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *port-and-encap*

Synopsis	Port to bind the interface
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> port <i>port-and-encap</i>
Tree	port
String length	1 to 45
Notes	The following elements are part of a choice: loopback or port .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

qos

Synopsis	Enter the qos context
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> qos
Tree	qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	configure service vpn <i>service-name</i> network-interface <i>interface-name</i> qos egress-instance <i>number</i>
Tree	egress-instance
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

egress-port-redirect-group *reference*

Synopsis	QoS queue group name
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Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> qos egress-port-redirect-group <i>reference</i>
Tree	egress-port-redirect-group
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	configure qos queue-group-templates egress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> qos ingress-fp-redirect-group <i>reference</i>
Tree	ingress-fp-redirect-group
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	configure qos queue-group-templates ingress queue-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> qos ingress-instance <i>number</i>
Tree	ingress-instance
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> qos network-policy reference
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	configure qos network <i>network-policy-name</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure service vprn <i>service-name</i> network-interface <i>interface-name</i> tos-marking-state keyword
Tree	tos-marking-state
Options	trusted, untrusted
Default	trusted
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp

Synopsis	Enable the ntp context
Context	configure service vprn <i>service-name</i> ntp
Tree	ntp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of NTP execution
Context	configure service vprn <i>service-name</i> ntp admin-state keyword
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authenticate *boolean*

Synopsis	Authentication of NTP PDUs when acting as a server
Context	configure service vprn <i>service-name</i> ntp authenticate <i>boolean</i>
Tree	authenticate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-check *boolean*

Synopsis	Authenticate NTP PDUs and reject mismatches
Context	configure service vprn <i>service-name</i> ntp authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key [[key-id](#)] *number*

Synopsis	Enter the authentication-key list instance
Context	configure service vprn <i>service-name</i> ntp authentication-key <i>number</i>
Tree	authentication-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[key-id] *number*

Synopsis	Authentication key ID used for NTP packets
Context	configure service vprn <i>service-name</i> ntp authentication-key <i>number</i>

Tree	authentication-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key *encrypted-leaf*

Synopsis	Key to authenticate NTP packets
Context	configure service vprn <i>service-name</i> ntp authentication-key <i>number</i> key <i>encrypted-leaf</i>
Tree	key
Description	This command specifies the key to authenticate NTP packets in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 126
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Authentication method to authenticate NTP packet
Context	configure service vprn <i>service-name</i> ntp authentication-key <i>number</i> type <i>keyword</i>
Tree	type
Options	des, message-digest
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Authentication keychain for unsolicited traffic
Context	configure service vprn <i>service-name</i> ntp authentication-keychain <i>reference</i>
Tree	authentication-keychain

Description	<p>This command configures the authentication keychain used to handle unsolicited NTP requests.</p> <p>If a request is received with a key ID that matches both a configured key and the keychain, the MAC is checked first using the key information. If the authentication fails, the MAC is checked using the information from the keychain.</p>
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast [[interface-name](#)] *reference*

Synopsis	Enter the broadcast list instance
Context	configure service vpn <i>service-name</i> ntp broadcast <i>reference</i>
Tree	broadcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *reference*

Synopsis	Local interface used to transmit NTP broadcast packets
Context	configure service vpn <i>service-name</i> ntp broadcast <i>reference</i>
Tree	broadcast
Reference	configure service vpn <i>service-name</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	configure service vpn <i>service-name</i> ntp broadcast <i>reference</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is</p>

received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.

Reference	configure system security keychains keychain <i>named-item</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-id reference

Synopsis	Authentication key and type used by the node
Context	configure service vprn <i>service-name</i> ntp broadcast <i>reference</i> key-id <i>reference</i>
Tree	key-id
Reference	configure service vprn <i>service-name</i> ntp authentication-key <i>number</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl number

Synopsis	TTL of messages transmitted by the broadcast address
Context	configure service vprn <i>service-name</i> ntp broadcast <i>reference</i> ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	127
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version number

Synopsis	NTP version number generated by the node
Context	configure service vprn <i>service-name</i> ntp broadcast <i>reference</i> version <i>number</i>
Tree	version

Range	2 to 4
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf [*ospf-instance*] *number*

Synopsis	Enter the ospf list instance
Context	configure <i>service vprn</i> <i>service-name ospf</i> <i>number</i>
Tree	<i>ospf</i>
Description	Commands in this context configure an OSPF protocol instance.
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPF instance
Context	configure <i>service vprn</i> <i>service-name ospf</i> <i>number</i>
Tree	<i>ospf</i>
Range	0
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure <i>service vprn</i> <i>service-name ospf</i> <i>number</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>service-name</i> ospf <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area [[area-id](#)] *ipv4-address*

Synopsis	Enter the area list instance
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i>
Tree	area
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[area-id] *ipv4-address*

Synopsis	Area-ID attribute
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i>
Tree	area
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-ne-profile *reference*

Synopsis	Network element profile to be advertised
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Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> advertise-ne-profile <i>reference</i>
Tree	advertise-ne-profile
Reference	configure system network-element-discovery profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [[ip-prefix-mask](#)] *ipv4-unicast-prefix*

Synopsis	Enter the area-range list instance
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> area-range <i>ipv4-unicast-prefix</i>
Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-mask] *ipv4-unicast-prefix*

Synopsis	IPv4 unicast address prefix and mask
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> area-range <i>ipv4-unicast-prefix</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure service vprn <i>service-name</i> ospf number area <i>ipv4-address</i> area-range <i>ipv4-unicast-prefix</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure service vprn <i>service-name</i> ospf number area <i>ipv4-address</i> blackhole-aggregate <i>boolean</i>
Tree	blackhole-aggregate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	configure service vprn <i>service-name</i> ospf number area <i>ipv4-address</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
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Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> advertise-subnet <i>boolean</i>
Tree	advertise-subnet
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the authentication key in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 94

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session
Context **configure** [service](#) [vpn](#) *service-name* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [authentication-keychain](#) *reference*
Tree [authentication-keychain](#)
Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *named-item*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

authentication-type *keyword*

Synopsis Authentication type used on OSPF interface
Context **configure** [service](#) [vpn](#) *service-name* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [authentication-type](#) *keyword*
Tree [authentication-type](#)
Options password, message-digest
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

bfd-liveness

Synopsis Enable the **bfd-liveness** context
Context **configure** [service](#) [vpn](#) *service-name* [ospf](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [bfd-liveness](#)
Tree [bfd-liveness](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

remain-down-on-failure *boolean*

Synopsis Force adjacency down on failure until session returns

Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict boolean

Synopsis	Enable BFD strict mode
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness strict <i>boolean</i>
Tree	strict
Description	<p>When configured to true, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-mode-holddown number

Synopsis	Adjacency up time delay after BFD session establishment
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness strict-mode-holddown <i>number</i>
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

conditional-advertise-prefix *reference*

Synopsis	Policy to conditionally advertise interface prefixes
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> conditional-advertise-prefix <i>reference</i>
Tree	conditional-advertise-prefix
Description	<p>This command specifies the policy that allows IS-IS, OSPF, and OSPFv3 to selectively advertise system or loopback interface prefixes (including associated SIDs and SRv6 locators) only when conditions defined in the route policy are met.</p> <p>The route policy evaluates the presence or absence of specific routes in the routing table, typically using constructs like route-exists. If the policy evaluates to accept, the interface prefix is advertised; if not, the prefix is suppressed.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Units	seconds

Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> interface-type <i>keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>broadcast - Broadcast network</p> <p>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.</p> <p>non-broadcast - Non-broadcast network</p> <p>point-to-point - Point-to-point link</p> <p>Set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.</p> <p>p2mp-nbma - Point-to-multipoint on a link without broadcast or multicast support</p> <p>No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.</p> <p>secondary - Multiple secondary adjacencies allowed</p> <p>A secondary interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load-balancing weight
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address interface interface-name load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address interface interface-name loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address interface interface-name loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map

Synopsis	Enable the policy-map context
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address interface interface-name loopfree-alternate policy-map
Tree	policy-map
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

route-nh-template *reference*

Synopsis Route next hop policy template name

Context **configure** [service vprn](#) *service-name* [ospf number area ipv4-address](#) [interface interface-name](#) [loopfree-alternate policy-map route-nh-template](#) *reference*

Tree [route-nh-template](#)

Reference **configure** [routing-options route-next-hop-policy template](#) *named-item*

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lsa-filter-out *keyword*

Synopsis LSA flooding reduction

Context **configure** [service vprn](#) *service-name* [ospf number area ipv4-address](#) [interface interface-name](#) [lsa-filter-out](#) *keyword*

Tree [lsa-filter-out](#)

Options none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults

Default none

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

message-digest-key [[key-id](#)] *number*

Synopsis Enter the **message-digest-key** list instance

Context **configure** [service vprn](#) *service-name* [ospf number area ipv4-address](#) [interface interface-name](#) [message-digest-key](#) *number*

Tree [message-digest-key](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[key-id] *number*

Synopsis Message digest index

Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md5 encrypted-leaf

Synopsis	MD5 hash key
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> message-digest-key <i>number</i> md5 encrypted-leaf
Tree	md5
Description	This command specifies the MD5 hash key in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 102
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric number

Synopsis	Route cost metric for the interface
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu number

Synopsis	MTU for the OSPF to use on the interface
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Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> mtu <i>number</i>
Tree	mtu
Range	512 to 9786
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [**address**] *ipv4-unicast-address*

Synopsis	Add a list entry for neighbor
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> neighbor <i>ipv4-unicast-address</i>
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> neighbor <i>ipv4-unicast-address</i>
Tree	neighbor
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> passive <i>boolean</i>
Tree	passive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> poll-interval <i>number</i>
Tree	poll-interval
Max. range	0 to 4294967295
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> priority <i>number</i>
Tree	priority
Range	0 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nssa

Synopsis	Enable the nssa context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> nssa

Tree	nssa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [\[ip-prefix-mask\]](#) *ipv4-unicast-prefix*

Synopsis	Enter the area-range list instance
Context	configure service vprn <i>service-name</i> ospf number area <i>ipv4-address</i> nssa area-range <i>ipv4-unicast-prefix</i>
Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-mask] *ipv4-unicast-prefix*

Synopsis	IPv4 unicast address prefix and mask
Context	configure service vprn <i>service-name</i> ospf number area <i>ipv4-address</i> nssa area-range <i>ipv4-unicast-prefix</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure service vprn <i>service-name</i> ospf number area <i>ipv4-address</i> nssa area-range <i>ipv4-unicast-prefix</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

originate-default-route

Synopsis	Enable the originate-default-route context
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Context	configure service vpn <i>service-name ospf number area ipv4-address nssa originate-default-route</i>
Tree	originate-default-route
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adjacency-check *boolean*

Synopsis	Perform adjacency checks before originating a default route
Context	configure service vpn <i>service-name ospf number area ipv4-address nssa originate-default-route adjacency-check boolean</i>
Tree	adjacency-check
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	configure service vpn <i>service-name ospf number area ipv4-address nssa originate-default-route type-nssa boolean</i>
Tree	type-nssa
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure service vpn <i>service-name ospf number area ipv4-address nssa redistribute-external boolean</i>
Tree	redistribute-external
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> nssa summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sham-link [[interface](#)] *interface-name* [ip-address](#) *ipv4-unicast-address*

Synopsis	Enter the sham-link list instance
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> sham-link <i>interface-name</i> ip-address <i>ipv4-unicast-address</i>
Tree	sham-link
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface] *interface-name*

Synopsis	Local interface name used for the sham-link
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> sham-link <i>interface-name</i> ip-address <i>ipv4-unicast-address</i>
Tree	sham-link
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv4-unicast-address*

Synopsis	IP address of the sham-link neighbor
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> sham-link <i>interface-name</i> ip-address <i>ipv4-unicast-address</i>
Tree	sham-link

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vpn service-name ospf number area ipv4-address sham-link interface-name ip-address ipv4-unicast-address admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key to send and receive OSPF packets
Context	configure service vpn service-name ospf number area ipv4-address sham-link interface-name ip-address ipv4-unicast-address authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	This command specifies the authentication key to send and receive OSPF packets in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 94
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vpn service-name ospf number area ipv4-address sham-link interface-name ip-address ipv4-unicast-address authentication-keychain <i>reference</i>

Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address sham-link interface-name ip-address ipv4-unicast-address authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address sham-link interface-name ip-address ipv4-unicast-address dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address sham-link interface-name ip-address ipv4-unicast-address hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

message-digest-key [[key-id](#)] *number*

Synopsis Enter the **message-digest-key** list instance

Context **configure** [service vprn](#) *service-name* [ospf](#) *number* [area](#) *ipv4-address* [sham-link](#) *interface-name* [ip-address](#) *ipv4-unicast-address* [message-digest-key](#) *number*

Tree [message-digest-key](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[key-id] *number*

Synopsis Message digest index

Context **configure** [service vprn](#) *service-name* [ospf](#) *number* [area](#) *ipv4-address* [sham-link](#) *interface-name* [ip-address](#) *ipv4-unicast-address* [message-digest-key](#) *number*

Tree [message-digest-key](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

md5 *encrypted-leaf*

Synopsis MD5 key or hash key

Context **configure** [service vprn](#) *service-name* [ospf](#) *number* [area](#) *ipv4-address* [sham-link](#) *interface-name* [ip-address](#) *ipv4-unicast-address* [message-digest-key](#) *number* [md5](#) *encrypted-leaf*

Tree [md5](#)

Description This command specifies the MD5 key or hash key in a protected format.
The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 102

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

metric number

Synopsis	Explicit route cost metric that is applied to the sham link
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address sham-link <i>interface-name</i> ip-address ipv4-unicast-address metric <i>number</i>
Tree	metric
Range	1 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval number

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address sham-link <i>interface-name</i> ip-address ipv4-unicast-address retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-delay number

Synopsis	Required LSA transmit time
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address sham-link <i>interface-name</i> ip-address ipv4-unicast-address transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stub

Synopsis	Enable the stub context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> stub
Tree	stub
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> stub default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-link [*router-id*] *ipv4-address* [transit-area](#) *reference*

Synopsis	Enter the virtual-link list instance
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i>
Tree	virtual-link
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[router-id] *ipv4-address*

Synopsis Router identity of the virtual link neighbor

Context **configure** [service vprn](#) *service-name* [ospf number area](#) *ipv4-address* [virtual-link](#) *ipv4-address* [transit-area reference](#)

Tree [virtual-link](#)

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transit-area *reference*

Synopsis Transit area that links backbone area to area without physical connection with the backbone

Context **configure** [service vprn](#) *service-name* [ospf number area](#) *ipv4-address* [virtual-link](#) *ipv4-address* [transit-area reference](#)

Tree [virtual-link](#)

Reference **configure** [service vprn](#) *service-name* [ospf number area](#) *ipv4-address*

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the OSPF interface

Context **configure** [service vprn](#) *service-name* [ospf number area](#) *ipv4-address* [virtual-link](#) *ipv4-address* [transit-area reference](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the authentication key in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 94
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-digest-key [[key-id](#)] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure service vpn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[key-id] *number*

Synopsis	Message digest index
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Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md5 encrypted-leaf

Synopsis	MD5 hash key
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> message-digest-key <i>number</i> md5 <i>encrypted-leaf</i>
Tree	md5
Description	This command specifies the MD5 hash key in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 102
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>service-name</i> ospf <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure service vprn <i>service-name</i> ospf number area ipv4-address virtual-link ipv4-address transit-area reference transit-delay number
Tree	transit-delay
Range	1 to 1800
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	configure service vprn <i>service-name</i> ospf number compatible-rfc1583 <i>boolean</i>
Tree	compatible-rfc1583
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn <i>service-name</i> ospf number export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn <i>service-name</i> ospf number export-limit log-percent number
Tree	log-percent
Range	1 to 100

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure <i>service vpn</i> <i>service-name</i> <i>ospf</i> <i>number</i> <i>export-limit</i> <i>number</i> <i>number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure <i>service vpn</i> <i>service-name</i> <i>ospf</i> <i>number</i> <i>export-policy</i> <i>reference</i>
Tree	<i>export-policy</i>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure <i>policy-options</i> <i>policy-statement</i> <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure service vprn <i>service-name</i> ospf <i>number</i> external-db-overflow interval <i>number</i>
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure service vprn <i>service-name</i> ospf <i>number</i> external-db-overflow limit <i>number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure service vprn <i>service-name</i> ospf <i>number</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255

Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure service vpn <i>service-name</i> ospf <i>number</i> graceful-restart
Tree	graceful-restart
Description	<p>Commands in this context enable OSPF graceful restart (GR) to minimize service interruption.</p> <p>When the control plane of a GR-capable router fails or restarts, the neighboring routers (GR helpers) temporarily preserve OSPF forwarding information. Traffic continues to be forwarded to the restarting router using the last-known forwarding tables. If the control plane of the restarting router becomes operationally and administratively up within the grace period, the restarting router resumes normal OSPF operation. If the grace period expires, the restarting router is presumed inactive and the OSPF topology is recalculated to route traffic around the failure.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure service vpn <i>service-name</i> ospf <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Description	<p>When configured to true, the router operates in OSPF graceful restart helper mode and assists restarting neighbors by maintaining adjacencies and forwarding state during their graceful restart interval.</p> <p>When configured to false, the router does not provide helper support and does not preserve adjacency or forwarding state for neighbors performing a graceful restart.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-resync-timeout *number*

Synopsis	Maximum resynchronization period
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Context	configure service vprn <i>service-name</i> ospf <i>number</i> graceful-restart helper-resync-timeout <i>number</i>
Tree	helper-resync-timeout
Description	This command configures the maximum resynchronization period. If the resynchronization takes longer than the configured value, the graceful restart process stops, and the OSPF neighbor session falls back to the ExStart state for normal adjacency establishment.
Range	120 to 900
Units	seconds
Default	120
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

protocol

Synopsis	Enter the protocol context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> graceful-restart protocol
Tree	protocol
Description	Commands in this context configure which RFC is used for OSPF graceful restart signaling. If both protocols are enabled, the OSPF interface automatically uses the method indicated by the first received graceful restart signaling packet on that interface.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

lls-restart-signaling *boolean*

Synopsis	Enable LLS restart signaling protocol
Context	configure service vprn <i>service-name</i> ospf <i>number</i> graceful-restart protocol lls-restart-signaling <i>boolean</i>
Tree	lls-restart-signaling
Description	When configured to true , the system enables support for RFC 4811 and RFC 4812. When configured to false , the system disables support for RFC 4811 and RFC 4812.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

standard *boolean*

Synopsis	Enable standard protocol for restart signaling
Context	configure service vprn <i>service-name</i> ospf number graceful-restart protocol standard <i>boolean</i>
Tree	standard
Description	When configured to true , the system enables support for RFC 3623. When configured to false , the system disables support for RFC 3623.
Default	true
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	configure service vprn <i>service-name</i> ospf number graceful-restart strict-lsa-checking <i>boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-dn-bit *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	configure service vprn <i>service-name</i> ospf number ignore-dn-bit <i>boolean</i>
Tree	ignore-dn-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure service vprn <i>service-name</i> ospf number import-policy <i>reference</i>

Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Description	<p>Commands in this context enable Loop-Free Alternate (LFA) computation by SPF under the IS-IS routing protocol level or under the OSPF routing protocol instance.</p> <p>When this command is enabled, it instructs the IGP SPF to attempt to pre-compute both a primary next hop and an LFA next hop for every learned prefix. IS-IS computes the primary SPF first and then computes the LFA SPF. The LFA backup next hop is only available after the LFA SPF is completed. When found, the LFA next hop is populated into the routing table along with the primary next hop for the prefix.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude

Synopsis	Enter the exclude context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure service vprn <i>service-name</i> ospf <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy

Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure service vprn <i>service-name</i> ospf <i>number</i> multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	configure service vprn <i>service-name</i> ospf <i>number</i> overload <i>boolean</i>
Tree	overload
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>service-name</i> ospf <i>number</i> overload-include-ext-1 <i>boolean</i>
Tree	overload-include-ext-1
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-ext-2 *boolean*

Synopsis Advertise routes with maximum metric value for overload
Context **configure** *service vprn* *service-name ospf* *number* **overload-include-ext-2** *boolean*
Tree [overload-include-ext-2](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-include-stub *boolean*

Synopsis Advertise all stub interfaces with max metric value
Context **configure** *service vprn* *service-name ospf* *number* **overload-include-stub** *boolean*
Tree [overload-include-stub](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

overload-on-boot

Synopsis Enable the **overload-on-boot** context
Context **configure** *service vprn* *service-name ospf* *number* **overload-on-boot**
Tree [overload-on-boot](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout *number*

Synopsis Time during which the router operates in overload state before reestablishing normal operations
Context **configure** *service vprn* *service-name ospf* *number* **overload-on-boot** **timeout** *number*
Tree [timeout](#)

Range	60 to 1800
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure service vprn <i>service-name</i> ospf <i>number</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	configure service vprn <i>service-name</i> ospf <i>number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority

Synopsis	Enter the rib-priority context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rib-priority
Tree	rib-priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rib-priority high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *router-id*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure service vprn <i>service-name</i> ospf <i>number</i> router-id <i>router-id</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rtr-adv-lsa-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure service vprn <i>service-name</i> ospf <i>number</i> rtr-adv-lsa-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

super-backbone *boolean*

Synopsis	Enable super backbone functionality
Context	configure service vprn <i>service-name</i> ospf <i>number</i> super-backbone <i>boolean</i>
Tree	super-backbone
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-dn-bit *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	configure service vprn <i>service-name</i> ospf <i>number</i> suppress-dn-bit <i>boolean</i>
Tree	suppress-dn-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enter the timers context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers
Tree	timers

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers lsa-accumulate <i>number</i>
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers lsa-arrival <i>number</i>
Tree	lsa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

Isa-generate

Synopsis Enter the **Isa-generate** context

Context **configure** [service vprn](#) *service-name* [ospf](#) *number* [timers](#) **Isa-generate**

Tree [Isa-generate](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

Isa-initial-wait *number*

Synopsis First wait period between OSPF LSA generation

Context **configure** [service vprn](#) *service-name* [ospf](#) *number* [timers](#) **Isa-generate** **Isa-initial-wait** *number*

Tree [Isa-initial-wait](#)

Range 10 to 600000

Units milliseconds

Default 5000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

Isa-second-wait *number*

Synopsis Hold time between the first and second LSA generation

Context **configure** [service vprn](#) *service-name* [ospf](#) *number* [timers](#) **Isa-generate** **Isa-second-wait** *number*

Tree [Isa-second-wait](#)

Range 10 to 600000

Units milliseconds

Default 5000

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers lsa-generate max-lsa-wait <i>number</i>
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers redistribute-delay <i>number</i>
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-wait

Synopsis	Enter the spf-wait context
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers spf-wait spf-initial-wait <i>number</i>

Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure service vprn <i>service-name</i> ospf <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure service vprn <i>service-name</i> ospf <i>number</i> unicast-import <i>boolean</i>
Tree	unicast-import

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-domain

Synopsis	Enable the vpn-domain context
Context	configure service vpn <i>service-name</i> ospf <i>number</i> vpn-domain
Tree	vpn-domain
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

id *system-id*

Synopsis	OSPF VPN domain ID
Context	configure service vpn <i>service-name</i> ospf <i>number</i> vpn-domain id <i>system-id</i>
Tree	id
Description	This command specifies the OSPF VPN domain. This is exchanged using BGP in the Extended Community attribute associated with a prefix.
String length	14
String format	'system-id' must be 12 hex digits in XXXX.XXXX.XXXX form (e.g. 0143.0438.aef0)
Default	0000.0000.0000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	VPN domain type
Context	configure service vpn <i>service-name</i> ospf <i>number</i> vpn-domain type <i>keyword</i>
Tree	type
Options	0005, 0105, 0205, 8005
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpn-tag *number*

Synopsis	OSPF VPN tag
Context	configure service vpn <i>service-name</i> ospf <i>number</i> vpn-tag <i>number</i>
Tree	vpn-tag
Max. range	0 to 4294967295
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf3 [[ospf-instance](#)] *number*

Synopsis	Enter the ospf3 list instance
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i>
Tree	ospf3
Description	Commands in this context create an OSPFv3 routing instance and configure associated command options.
Max. instances	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ospf-instance] *number*

Synopsis	OSPF instance
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i>
Tree	ospf3
Range	0 to 31 64 to 95
MD-CLI default	0
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Options	false, link, area, as
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area [[area-id](#)] *ipv4-address*

Synopsis	Enter the area list instance
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i>
Tree	area
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[area-id] *ipv4-address*

Synopsis	Area-ID attribute
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i>
Tree	area
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the area-range list instance
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
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Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> blackhole-aggregate <i>boolean</i>
Tree	blackhole-aggregate
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> import-policy <i>reference</i>
Tree	import-policy

Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* **advertise-router-capability** *boolean*

Tree [advertise-router-capability](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication

Synopsis Enable the **authentication** context

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* **authentication**

Tree [authentication](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

inbound *reference*

Synopsis *sa-name*

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [area](#) *ipv4-address* [interface](#) *interface-name* [authentication](#) **inbound** *reference*

Tree [inbound](#)

Reference **configure** [ipsec static-sa](#) *named-item*

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

outbound *reference*

Synopsis *sa-name*

Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> authentication outbound <i>reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict *boolean*

Synopsis	Enable BFD strict mode
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> bfd-liveness strict <i>boolean</i>
Tree	strict
Description	When configured to true , the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true , the router uses Link-Local Signaling (LLS)

with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.

During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	configure service vprn service-name ospf3 number area ipv4-address interface interface-name bfd-liveness strict-mode-holddown number
Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

conditional-advertise-prefix *reference*

Synopsis	Policy to conditionally advertise interface prefixes
Context	configure service vprn service-name ospf3 number area ipv4-address interface interface-name conditional-advertise-prefix reference
Tree	conditional-advertise-prefix
Description	<p>This command specifies the policy that allows IS-IS, OSPF, and OSPFv3 to selectively advertise system or loopback interface prefixes (including associated SIDs and SRv6 locators) only when conditions defined in the route policy are met.</p> <p>The route policy evaluates the presence or absence of specific routes in the routing table, typically using constructs like route-exists. If the policy evaluates to accept, the interface prefix is advertised; if not, the prefix is suppressed.</p>
Reference	configure policy-options policy-statement named-item-64
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>interface</i> <i>interface-name</i> dead-interval <i>number</i>
Tree	<i>dead-interval</i>
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>interface</i> <i>interface-name</i> hello-interval <i>number</i>
Tree	<i>hello-interval</i>
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-type *keyword*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>ipv4-address</i> <i>interface</i> <i>interface-name</i> interface-type <i>keyword</i>
Tree	<i>interface-type</i>
Description	This command specifies the interface type. broadcast - Broadcast network

To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.

non-broadcast - Non-broadcast network

point-to-point - Point-to-point link

Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.

p2mp-nbma - Point-to-multipoint on a link without broadcast or multicast support

No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.

secondary - Multiple secondary adjacencies allowed

A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load-balancing weight
Context	configure service vprn service-name ospf3 number area ipv4-address interface interface-name load-balancing-weight number
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure service vprn service-name ospf3 number area ipv4-address interface interface-name loopfree-alternate
Tree	loopfree-alternate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy-map

Synopsis	Enable the policy-map context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> lsa-filter-out <i>keyword</i>
Tree	lsa-filter-out

Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Route cost metric for the interface
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> metric <i>number</i>
Tree	metric
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mtu *number*

Synopsis	MTU for the OSPF to use on the interface
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> mtu <i>number</i>
Tree	mtu
Range	512 to 9786
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for neighbor
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> neighbor (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IPv6 link local address of the OSPFv3 neighbor
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> neighbor (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	neighbor
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

passive *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> passive <i>boolean</i>
Tree	passive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> poll-interval <i>number</i>
Tree	poll-interval
Max. range	0 to 4294967295
Units	seconds
Default	120
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> priority <i>number</i>

Tree	priority
Range	0 to 255
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> interface <i>interface-name</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Units	seconds

Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-rollover-interval *number*

Synopsis	Key rollover interval
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> key-rollover-interval <i>number</i>
Tree	key-rollover-interval
Range	10 to 300
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nssa

Synopsis	Enable the nssa context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa
Tree	nssa
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

area-range [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the area-range list instance
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	area-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

originate-default-route

Synopsis	Enable the originate-default-route context
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> nssa originate-default-route
Tree	originate-default-route
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

adjacency-check *boolean*

Synopsis Perform adjacency checks before originating a default route

Context **configure** [service vprn](#) [service-name ospf3](#) [number area ipv4-address](#) [nssa originate-default-route adjacency-check](#) *boolean*

Tree [adjacency-check](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

type-nssa *boolean*

Synopsis Generate a default route using NSSA-LSA type

Context **configure** [service vprn](#) [service-name ospf3](#) [number area ipv4-address](#) [nssa originate-default-route type-nssa](#) *boolean*

Tree [type-nssa](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

redistribute-external *boolean*

Synopsis Redistribute external routes into the NSSA

Context **configure** [service vprn](#) [service-name ospf3](#) [number area ipv4-address](#) [nssa redistribute-external](#) *boolean*

Tree [redistribute-external](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

summaries *boolean*

Synopsis Send summary (Type 3) LSAs into the NSSA on an ABR

Context	configure service vprn service-name ospf3 number area ipv4-address nssa summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

stub

Synopsis	Enable the stub context
Context	configure service vprn service-name ospf3 number area ipv4-address stub
Tree	stub
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-metric *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	configure service vprn service-name ospf3 number area ipv4-address stub default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure service vprn service-name ospf3 number area ipv4-address stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

virtual-link [[router-id](#)] [ipv4-address](#) [transit-area](#) *reference*

Synopsis	Enter the virtual-link list instance
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area ipv4-address virtual-link ipv4-address transit-area <i>reference</i>
Tree	virtual-link
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-id] [ipv4-address](#)

Synopsis	Router identity of the virtual link neighbor
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area ipv4-address virtual-link ipv4-address transit-area <i>reference</i>
Tree	virtual-link
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit-area *reference*

Synopsis	Transit area that links backbone area to area without physical connection with the backbone
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area ipv4-address virtual-link ipv4-address transit-area <i>reference</i>
Tree	virtual-link
Reference	configure service vprn <i>service-name</i> ospf3 <i>number</i> area ipv4-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
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Context	configure service vpn <i>service-name ospf3 number area ipv4-address virtual-link ipv4-address transit-area reference admin-state keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication

Synopsis	Enable the authentication context
Context	configure service vpn <i>service-name ospf3 number area ipv4-address virtual-link ipv4-address transit-area reference authentication</i>
Tree	authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inbound reference

Synopsis	sa-name
Context	configure service vpn <i>service-name ospf3 number area ipv4-address virtual-link ipv4-address transit-area reference authentication inbound reference</i>
Tree	inbound
Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound reference

Synopsis	sa-name
Context	configure service vpn <i>service-name ospf3 number area ipv4-address virtual-link ipv4-address transit-area reference authentication outbound reference</i>
Tree	outbound
Reference	configure ipsec static-sa <i>named-item</i>
Notes	This element is mandatory.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> area <i>ipv4-address</i> virtual-link <i>ipv4-address</i> transit-area <i>reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Units	seconds
Default	5
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

transit-delay *number*

Synopsis Required LSA transmit time

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [area ipv4-address](#) [virtual-link ipv4-address](#) [transit-area](#) *reference* [transit-delay](#) *number*

Tree [transit-delay](#)

Range 1 to 1800

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

export-limit

Synopsis Enable the **export-limit** context

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [export-limit](#)

Tree [export-limit](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [export-limit](#) [log-percent](#) *number*

Tree [log-percent](#)

Range 1 to 100

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

number *number*

Synopsis Maximum routes or prefixes exported from route table

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [export-limit](#) [number](#) *number*

Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> external-db-overflow
Tree	external-db-overflow
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure service vprn <i>service-name ospf3</i> <i>number</i> external-db-overflow interval <i>number</i>
Tree	interval
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure service vprn <i>service-name ospf3</i> <i>number</i> external-db-overflow limit <i>number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure service vprn <i>service-name ospf3</i> <i>number</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-restart

Synopsis	Enable the graceful-restart context
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Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> graceful-restart
Tree	graceful-restart
Description	<p>Commands in this context enable OSPF graceful restart (GR) to minimize service interruption.</p> <p>When the control plane of a GR-capable router fails or restarts, the neighboring routers (GR helpers) temporarily preserve OSPF forwarding information. Traffic continues to be forwarded to the restarting router using the last-known forwarding tables. If the control plane of the restarting router becomes operationally and administratively up within the grace period, the restarting router resumes normal OSPF operation. If the grace period expires, the restarting router is presumed inactive and the OSPF topology is recalculated to route traffic around the failure.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

helper-mode *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Description	<p>When configured to true, the router operates in OSPF graceful restart helper mode and assists restarting neighbors by maintaining adjacencies and forwarding state during their graceful restart interval.</p> <p>When configured to false, the router does not provide helper support and does not preserve adjacency or forwarding state for neighbors performing a graceful restart.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

strict-lsa-checking *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> graceful-restart strict-lsa-checking <i>boolean</i>
Tree	strict-lsa-checking
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-dn-bit *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> ignore-dn-bit <i>boolean</i>
Tree	ignore-dn-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Description	<p>Commands in this context enable Loop-Free Alternate (LFA) computation by SPF under the IS-IS routing protocol level or under the OSPF routing protocol instance.</p> <p>When this command is enabled, it instructs the IGP SPF to attempt to pre-compute both a primary next hop and an LFA next hop for every learned prefix. IS-IS computes the primary SPF first and then computes the LFA SPF. The LFA backup next hop is only available after the LFA SPF is completed. When found, the LFA next hop is populated into the routing table along with the primary next hop for the prefix.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exclude

Synopsis	Enter the exclude context
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> loopfree-alternate exclude
Tree	exclude
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	<p>This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.</p> <p>An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure service vpn <i>service-name</i> ospf3 <i>number</i> multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> overload <i>boolean</i>
Tree	overload
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> overload-include-ext-1 <i>boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> overload-include-ext-2 <i>boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> overload-include-stub <i>boolean</i>
Tree	overload-include-stub
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

overload-on-boot

Synopsis Enable the **overload-on-boot** context

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [overload-on-boot](#)

Tree [overload-on-boot](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

timeout *number*

Synopsis Time during which the router operates in overload state before reestablishing normal operations

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [overload-on-boot](#) [timeout](#) *number*

Tree [timeout](#)

Range 60 to 1800

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

preference *number*

Synopsis Preference for OSPF internal routes

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [preference](#) *number*

Tree [preference](#)

Range 1 to 255

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

reference-bandwidth *number*

Synopsis Bandwidth to reference default costing of interfaces

Context **configure** [service vprn](#) *service-name* [ospf3](#) *number* [reference-bandwidth](#) *number*

Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rib-priority

Synopsis	Enter the rib-priority context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> rib-priority
Tree	rib-priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

high

Synopsis	Enter the high context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> rib-priority high
Tree	high
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *router-id***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>router-id</i> <i>router-id</i>
Tree	<i>router-id</i>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>rtr-adv-lsa-limit</i>
Tree	<i>rtr-adv-lsa-limit</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>rtr-adv-lsa-limit</i> <i>log-only</i> <i>boolean</i>
Tree	<i>log-only</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>ospf3</i> <i>number</i> <i>rtr-adv-lsa-limit</i> <i>max-lsa-count</i> <i>number</i>

Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> rtr-adv-lsa-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> rtr-adv-lsa-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Units	percent
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suppress-dn-bit *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> suppress-dn-bit <i>boolean</i>

Tree	suppress-dn-bit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enter the timers context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> timers lsa-accumulate <i>number</i>
Tree	lsa-accumulate
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> timers Isa-arrival <i>number</i>
Tree	Isa-arrival
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-generate

Synopsis	Enter the Isa-generate context
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> timers Isa-generate
Tree	Isa-generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> timers Isa-generate Isa-initial-wait <i>number</i>
Tree	Isa-initial-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

Isa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
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Context	configure service vprn <i>service-name ospf3 number timers lsa-generate lsa-second-wait number</i>
Tree	lsa-second-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure service vprn <i>service-name ospf3 number timers lsa-generate max-lsa-wait number</i>
Tree	max-lsa-wait
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure service vprn <i>service-name ospf3 number timers redistribute-delay number</i>
Tree	redistribute-delay
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-wait

Synopsis	Enter the spf-wait context
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Context	configure service vprn service-name ospf3 number timers spf-wait
Tree	spf-wait
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure service vprn service-name ospf3 number timers spf-wait spf-initial-wait number
Tree	spf-initial-wait
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure service vprn service-name ospf3 number timers spf-wait spf-max-wait number
Tree	spf-max-wait
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure service vprn service-name ospf3 number timers spf-wait spf-second-wait number
Tree	spf-second-wait
Range	10 to 100000

Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure service vprn <i>service-name</i> ospf3 <i>number</i> unicast-import <i>boolean</i>
Tree	unicast-import
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pim

Synopsis	Enable the pim context
Context	configure service vprn <i>service-name</i> pim
Tree	pim
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM
Context	configure service vprn <i>service-name</i> pim admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

apply-to *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
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Context	configure service vpn <i>service-name</i> pim apply-to <i>keyword</i>
Tree	apply-to
Options	all, none
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bgp-nh-override *boolean*

Synopsis	Disable VRF import EC support for next-hop resolution
Context	configure service vpn <i>service-name</i> pim bgp-nh-override <i>boolean</i>
Tree	bgp-nh-override
Description	When configured to true , the RPF check is performed using IPv4 VPN AF next-hop instead of IPv4 AF VRF import extended community (EC). When configured to false , the RPF check is performed using IPv4 AF VRF import EC.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import

Synopsis	Enter the import context
Context	configure service vpn <i>service-name</i> pim import
Tree	import
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

join-policy *reference*

Synopsis	Policy name
Context	configure service vpn <i>service-name</i> pim import join-policy <i>reference</i>
Tree	join-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5

Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register-policy *reference*

Synopsis	Policy name
Context	configure service vpn <i>service-name</i> pim import register-policy <i>reference</i>
Tree	register-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [[interface-name](#)] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i>
Tree	interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Interface name
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i>
Tree	interface
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> assert-period <i>number</i>
Tree	assert-period
Range	1 to 300
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> bfd-liveness
Tree	bfd-liveness
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> bfd-liveness ipv6 boolean
Tree	ipv6
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsm-check-rtr-alert *boolean*

Synopsis	Check router alert option in bootstrap messages received
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> bsm-check-rtr-alert boolean
Tree	bsm-check-rtr-alert
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> hello-interval number
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> improved-assert <i>boolean</i>
Tree	improved-assert
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

instant-prune-echo *boolean*

Synopsis	Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> instant-prune-echo <i>boolean</i>
Tree	instant-prune-echo
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> ipv4

Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group

Synopsis	Enter the monitor-oper-group context
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group
Tree	monitor-oper-group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Operational group identifier
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group name <i>reference</i>
Tree	name
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv4 monitor-oper-group operation <i>keyword</i>
Tree	operation
Options	add, subtract, set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
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Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> <i>interface</i> <i>interface-name</i> <i>ipv4</i> <i>monitor-oper-group</i> <i>priority-delta</i> <i>number</i>
Tree	<i>priority-delta</i>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> <i>interface</i> <i>interface-name</i> <i>ipv4</i> <i>multicast</i> <i>boolean</i>
Tree	<i>multicast</i>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> <i>interface</i> <i>interface-name</i> <i>ipv6</i>
Tree	<i>ipv6</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

monitor-oper-group

Synopsis	Enter the monitor-oper-group context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> <i>interface</i> <i>interface-name</i> <i>ipv6</i> <i>monitor-oper-group</i>
Tree	<i>monitor-oper-group</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Operational group identifier
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv6 monitor-oper-group name <i>reference</i>
Tree	name
Reference	configure service oper-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

operation *keyword*

Synopsis	Operation performed when operational group is active
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv6 monitor-oper-group operation <i>keyword</i>
Tree	operation
Options	add, subtract, set
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-delta *number*

Synopsis	Delta priority with operation when operational group is active
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv6 monitor-oper-group priority-delta <i>number</i>
Tree	priority-delta
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	configure service vpn <i>service-name</i> pim interface <i>interface-name</i> ipv6 multicast <i>boolean</i>
Tree	multicast

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> max-groups <i>number</i>
Tree	max-groups
Range	0 1 to 16000
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> multicast-senders <i>keyword</i>
Tree	multicast-senders
Options	auto, always, never
Default	auto
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	DR election priority for this interface
Context	configure service vprn <i>service-name</i> pim interface <i>interface-name</i> priority <i>number</i>
Tree	priority
Description	This command sets the priority value to elect the DR. The DR election priority is a 32-bit unsigned number and the numerically larger priority is always preferred.
Range	1 to 4294967295
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

sticky-dr

Synopsis Enable the **sticky-dr** context

Context **configure** [service vprn](#) *service-name* [pim interface](#) *interface-name* **sticky-dr**

Tree [sticky-dr](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority *number*

Synopsis DR election priority for this interface

Context **configure** [service vprn](#) *service-name* [pim interface](#) *interface-name* **sticky-dr** **priority** *number*

Tree [priority](#)

Range 1 to 4294967295

Default 1024

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

three-way-hello *boolean*

Synopsis Allow three-way hello compatibility mode

Context **configure** [service vprn](#) *service-name* [pim interface](#) *interface-name* **three-way-hello** *boolean*

Tree [three-way-hello](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tracking-support *boolean*

Synopsis Allow upstream routers to explicitly track join membership

Context **configure** [service vprn](#) *service-name* [pim interface](#) *interface-name* **tracking-support** *boolean*

Tree	tracking-support
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>service-name</i> pim ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	configure service vprn <i>service-name</i> pim ipv4 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpf-table *keyword*

Synopsis	Route table for RPF lookup
Context	configure service vprn <i>service-name</i> pim ipv4 rpf-table <i>keyword</i>
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure service vpn <i>service-name</i> pim ipv4 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

register-message *ipv4-unicast-address*

Synopsis	Source IPv4 address for PIM register messages
Context	configure service vpn <i>service-name</i> pim ipv4 source-address register-message <i>ipv4-unicast-address</i>
Tree	register-message
Description	<p>This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	configure service vpn <i>service-name</i> pim ipv4 ssm-assert-compatible-mode <i>boolean</i>
Tree	ssm-assert-compatible-mode
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure service vprn <i>service-name</i> pim ipv4 ssm-default-range <i>boolean</i>
Tree	ssm-default-range
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure service vprn <i>service-name</i> pim ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	configure service vprn <i>service-name</i> pim ipv6 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rpf-table *keyword*

Synopsis	Route table for RPF lookup
Context	configure service vprn <i>service-name</i> pim ipv6 rpf-table <i>keyword</i>
Tree	rpf-table
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

source-address

Synopsis Enter the **source-address** context

Context **configure** [service vpn](#) *service-name* [pim ipv6 source-address](#)

Tree [source-address](#)

Description Commands in this context configure the source IP address for PIM messages.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

register-message *ipv6-unicast-address*

Synopsis Source IPv6 address for PIM register messages

Context **configure** [service vpn](#) *service-name* [pim ipv6 source-address](#) [register-message](#) *ipv6-unicast-address*

Tree [register-message](#)

Description This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.

When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ssm-default-range *boolean*

Synopsis SSM default range

Context **configure** [service vpn](#) *service-name* [pim ipv6 ssm-default-range](#) *boolean*

Tree [ssm-default-range](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mtu-over-head *number*

Synopsis	MVPN tunnel MTU size reduction to allow for BIER header
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> mtu-over-head <i>number</i>
Tree	<i>mtu-over-head</i>
Description	This command subtracts the specified value from the MVPN tunnel MTU to allow a BIER header to be added without exceeding the network MTU.
Range	0 44 76 140 268 536
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

non-dr-attract-traffic *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> non-dr-attract-traffic <i>boolean</i>
Tree	<i>non-dr-attract-traffic</i>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp

Synopsis	Enter the rp context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> rp
Tree	<i>rp</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bootstrap

Synopsis	Enter the bootstrap context
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>pim</i> <i>rp</i> bootstrap
Tree	<i>bootstrap</i>
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

export reference

Synopsis	Export policy to control the flow of bootstrap messages
Context	configure service vprn <i>service-name</i> pim rp bootstrap export <i>reference</i>
Tree	export
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import reference

Synopsis	Import policy to control the flow of bootstrap messages
Context	configure service vprn <i>service-name</i> pim rp bootstrap import <i>reference</i>
Tree	import
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure service vprn <i>service-name</i> pim rp ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

anycast [[ipv4-address](#)] *ipv4-unicast-address* [rp-set-peer](#) *ipv4-unicast-address*

Synopsis	Add a list entry for anycast
Context	configure service vprn <i>service-name</i> pim rp ipv4 anycast <i>ipv4-unicast-address</i> rp-set-peer <i>ipv4-unicast-address</i>
Tree	anycast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[ipv4-address](#)] *ipv4-unicast-address*

Synopsis	Loopback IP address shared by routes in RP set
Context	configure service vprn <i>service-name</i> pim rp ipv4 anycast <i>ipv4-unicast-address</i> rp-set-peer <i>ipv4-unicast-address</i>
Tree	anycast
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-set-peer *ipv4-unicast-address*

Synopsis	Peer in the anycast RP-set
Context	configure service vprn <i>service-name</i> pim rp ipv4 anycast <i>ipv4-unicast-address</i> rp-set-peer <i>ipv4-unicast-address</i>
Tree	anycast
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-rp-discovery *boolean*

Synopsis	Enable auto-RP discovery mode and auto-RP listener
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Context	configure service vprn <i>service-name</i> pim rp ipv4 auto-rp-discovery <i>boolean</i>
Tree	auto-rp-discovery
Description	When configured to true , the system enables the auto-RP protocol in discovery mode and the auto-RP listener functionality.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure service vprn <i>service-name</i> pim rp ipv4 bsr-candidate
Tree	bsr-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure service vprn <i>service-name</i> pim rp ipv4 bsr-candidate address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure service vprn <i>service-name</i> pim rp ipv4 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

hash-mask-len *number*

Synopsis Length for bootstrap hash mask

Context **configure** *service vprn service-name pim rp ipv4 bsr-candidate hash-mask-len number*

Tree *hash-mask-len*

Range 0 to 32

Default 30

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority *number*

Synopsis Bootstrap priority of the router

Context **configure** *service vprn service-name pim rp ipv4 bsr-candidate priority number*

Tree *priority*

Range 0 to 255

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

candidate *boolean*

Synopsis Enable auto-RP to advertise candidate RP information

Context **configure** *service vprn service-name pim rp ipv4 candidate boolean*

Tree *candidate*

Description When configured to **true**, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.

When configured to **false**, the candidate RP information is not specified.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mapping-agent *boolean*

Synopsis	Enable the mapping agent on the node
Context	configure <i>service vpn service-name pim rp ipv4 mapping-agent boolean</i>
Tree	<i>mapping-agent</i>
Description	When configured to true , the mapping agent is enabled on the node. The auto-RP MA observes the auto-rp-announcement messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure <i>service vpn service-name pim rp ipv4 rp-candidate</i>
Tree	<i>rp-candidate</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	Local RP address
Context	configure <i>service vpn service-name pim rp ipv4 rp-candidate address ipv4-unicast-address</i>
Tree	<i>address</i>
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
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Context	configure service vprn <i>service-name</i> pim rp ipv4 rp-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [**ipv4-prefix**] *ipv4-multicast-prefix*

Synopsis	Add a list entry for group-range
Context	configure service vprn <i>service-name</i> pim rp ipv4 rp-candidate group-range <i>ipv4-multicast-prefix</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-prefix] *ipv4-multicast-prefix*

Synopsis	IPv4 address and prefix length
Context	configure service vprn <i>service-name</i> pim rp ipv4 rp-candidate group-range <i>ipv4-multicast-prefix</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure service vprn <i>service-name</i> pim rp ipv4 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

priority *number*

Synopsis Candidate RP priority

Context **configure** *service vprn service-name pim rp ipv4 rp-candidate* *priority number*

Tree *priority*

Range 0 to 255

Default 192

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

static

Synopsis Enter the **static** context

Context **configure** *service vprn service-name pim rp ipv4 static*

Tree *static*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address [*ipv4-address*] *ipv4-unicast-address*

Synopsis Enter the **address** list instance

Context **configure** *service vprn service-name pim rp ipv4 static address ipv4-unicast-address*

Tree *address*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ipv4-address] *ipv4-unicast-address*

Synopsis IPv4 address for the static RP

Context **configure** *service vprn service-name pim rp ipv4 static address ipv4-unicast-address*

Tree *address*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-prefix [[ipv4-prefix](#)] *ipv4-multicast-prefix*

Synopsis	Add a list entry for group-prefix
Context	configure service vprn <i>service-name</i> pim rp ipv4 static address <i>ipv4-unicast-address</i> group-prefix <i>ipv4-multicast-prefix</i>
Tree	group-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv4-prefix] *ipv4-multicast-prefix*

Synopsis	IPv4 address and prefix length
Context	configure service vprn <i>service-name</i> pim rp ipv4 static address <i>ipv4-unicast-address</i> group-prefix <i>ipv4-multicast-prefix</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure service vprn <i>service-name</i> pim rp ipv4 static address <i>ipv4-unicast-address</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
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Context	configure service vprn <i>service-name</i> pim rp ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

anycast [[ipv6-address](#)] *ipv6-unicast-address* [rp-set-peer](#) *ipv6-unicast-address*

Synopsis	Add a list entry for anycast
Context	configure service vprn <i>service-name</i> pim rp ipv6 anycast <i>ipv6-unicast-address</i> rp-set-peer <i>ipv6-unicast-address</i>
Tree	anycast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-unicast-address*

Synopsis	Loopback IP address shared by routes in RP set
Context	configure service vprn <i>service-name</i> pim rp ipv6 anycast <i>ipv6-unicast-address</i> rp-set-peer <i>ipv6-unicast-address</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-set-peer *ipv6-unicast-address*

Synopsis	Peer in the anycast RP set
Context	configure service vprn <i>service-name</i> pim rp ipv6 anycast <i>ipv6-unicast-address</i> rp-set-peer <i>ipv6-unicast-address</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure service vprn <i>service-name</i> pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-unicast-address*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure service vprn <i>service-name</i> pim rp ipv6 bsr-candidate address <i>ipv6-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure service vprn <i>service-name</i> pim rp ipv6 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure service vprn <i>service-name</i> pim rp ipv6 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

priority *number*

Synopsis Bootstrap priority of the router

Context **configure** [service vprn](#) *service-name* [pim rp ipv6 bsr-candidate](#) *priority number*

Tree [priority](#)

Range 0 to 255

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

embedded-rp

Synopsis Enable the **embedded-rp** context

Context **configure** [service vprn](#) *service-name* [pim rp ipv6 embedded-rp](#)

Tree [embedded-rp](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of embedded RP

Context **configure** [service vprn](#) *service-name* [pim rp ipv6 embedded-rp admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group-range [[ipv6-prefix](#)] *ipv6-multicast-prefix*

Synopsis Add a list entry for **group-range**

Context **configure** [service vprn](#) *service-name* [pim rp ipv6 embedded-rp group-range](#) *ipv6-multicast-prefix*

Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**ipv6-prefix**] *ipv6-multicast-prefix*

Synopsis	IPv6 address and prefix length
Context	configure service vprn <i>service-name</i> pim rp ipv6 embedded-rp group-range <i>ipv6-multicast-prefix</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate
Tree	rp-candidate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-unicast-address*

Synopsis	Local RP address
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate address <i>ipv6-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [[ipv6-prefix](#)] *ipv6-multicast-prefix*

Synopsis	Add a list entry for group-range
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate group-range <i>ipv6-multicast-prefix</i>
Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-multicast-prefix*

Synopsis	IPv6 address and prefix length
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate group-range <i>ipv6-multicast-prefix</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Units	seconds
Default	150
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	Candidate RP priority
Context	configure service vprn <i>service-name</i> pim rp ipv6 rp-candidate <i>priority</i> <i>number</i>
Tree	priority
Range	0 to 255
Default	192
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure service vprn <i>service-name</i> pim rp ipv6 static
Tree	static
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[ipv6-address](#)] *ipv6-unicast-address*

Synopsis	Enter the address list instance
Context	configure service vprn <i>service-name</i> pim rp ipv6 static address <i>ipv6-unicast-address</i>
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-address] *ipv6-unicast-address*

Synopsis	Static IP address of the RP
Context	configure service vprn <i>service-name</i> pim rp ipv6 static address <i>ipv6-unicast-address</i>
Tree	address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-prefix [[ipv6-prefix](#)] *ipv6-multicast-prefix*

Synopsis	Add a list entry for group-prefix
Context	configure service vpn <i>service-name</i> pim rp ipv6 static address <i>ipv6-unicast-address</i> group-prefix <i>ipv6-multicast-prefix</i>
Tree	group-prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipv6-prefix] *ipv6-multicast-prefix*

Synopsis	IPv6 address and prefix length
Context	configure service vpn <i>service-name</i> pim rp ipv6 static address <i>ipv6-unicast-address</i> group-prefix <i>ipv6-multicast-prefix</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure service vpn <i>service-name</i> pim rp ipv6 static address <i>ipv6-unicast-address</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spt-switchover [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the spt-switchover list instance
Context	configure service vpn <i>service-name</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	spt-switchover
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	configure service vprn <i>service-name</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	spt-switchover
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

threshold (*number* | *keyword*)

Synopsis	SPT switchover threshold
Context	configure service vprn <i>service-name</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold (<i>number</i> <i>keyword</i>)
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssm-groups

Synopsis	Enter the ssm-groups context
Context	configure service vprn <i>service-name</i> pim ssm-groups
Tree	ssm-groups
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-range [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for group-range
Context	configure service vprn <i>service-name</i> pim ssm-groups group-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)

Tree	group-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP address and mask length
Context	configure service vprn <i>service-name</i> pim ssm-groups group-range (<i>ipv4-prefix ipv6-prefix</i>)
Tree	group-range
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius

Synopsis	Enter the radius context
Context	configure service vprn <i>service-name</i> radius
Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[name](#)] *named-item*

Synopsis	Enter the server list instance
Context	configure service vprn <i>service-name</i> radius server <i>named-item</i>
Tree	server
Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	External RADIUS server name
Context	configure service vprn <i>service-name</i> radius server <i>named-item</i>

Tree	server
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	configure service vprn <i>service-name</i> radius server <i>named-item</i> accept-coa <i>boolean</i>
Tree	accept-coa
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

acct-port *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	configure service vprn <i>service-name</i> radius server <i>named-item</i> acct-port <i>number</i>
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure service vprn <i>service-name</i> radius server <i>named-item</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auth-port *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>radius server</i> <i>named-item</i> auth-port <i>number</i>
Tree	<i>auth-port</i>
Range	1 to 65535
Default	1812
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>radius server</i> <i>named-item</i> description <i>description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

insert-message-authenticator *boolean*

Synopsis	Insert Message-Authenticator in Access-Request
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>radius server</i> <i>named-item</i> insert-message-authenticator <i>boolean</i>
Tree	<i>insert-message-authenticator</i>
Description	When configured to true , the router inserts a Message-Authenticator attribute as the first attribute in Access-Request messages.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
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Context	configure service vpn <i>service-name</i> radius server <i>named-item</i> pending-requests-limit <i>number</i>
Tree	pending-requests-limit
Range	1 to 4096
Default	4096
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

require-message-authenticator *boolean*

Synopsis	Require Message-Authenticator in Access-Request reply
Context	configure service vpn <i>service-name</i> radius server <i>named-item</i> require-message-authenticator <i>boolean</i>
Tree	require-message-authenticator
Description	When configured to true , the router silently drops responses to Access-Requests without a Message-Authenticator attribute.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

secret *encrypted-leaf*

Synopsis	Secret key associated with this RADIUS server
Context	configure service vpn <i>service-name</i> radius server <i>named-item</i> secret <i>encrypted-leaf</i>
Tree	secret
Description	<p>This command specifies the secret key associated with this RADIUS server in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 166
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	Use the TLS client profile for RADIUS over TLS
Context	configure service vpn <i>service-name</i> radius server <i>named-item</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	When configured, the router uses the TLS client profile to encrypt RADIUS communication and RADIUS messages are sent using TLS.
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

rip

Synopsis	Enable the rip context
Context	configure service vpn <i>service-name</i> rip
Tree	rip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIP instance
Context	configure service vpn <i>service-name</i> rip admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication password passed between RIP neighbors
Context	configure service vpn <i>service-name</i> rip authentication-key <i>encrypted-leaf</i>
Tree	authentication-key

Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 102
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	configure <i>service vpn</i> <i>service-name</i> <i>rip</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command sets the type of authentication to be used between RIP neighbors.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure <i>service vpn</i> <i>service-name</i> <i>rip</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>service-name</i> rip check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> rip description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn <i>service-name</i> rip export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn <i>service-name</i> rip export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn <i>service-name</i> rip export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	configure service vprn <i>service-name</i> rip export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group [[group-name](#)] *named-item*

Synopsis	Enter the group list instance
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i>

Tree	group
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group-name] *named-item*

Synopsis	RIP group name
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i>
Tree	group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication password passed between RIP neighbors
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p>

When unconfigured, the authentication password is removed from the configuration and authentication is disabled.

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 102
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

authentication-type *keyword*

Synopsis Authentication type
Context **configure** *service vpn service-name rip group named-item authentication-type keyword*
Tree *authentication-type*
Description This command configures the type of authentication to be used.
The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.
When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options none, password, md5, md20
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis Enable BFD to control the state of protocol adjacency
Context **configure** *service vpn service-name rip group named-item bfd-liveness boolean*
Tree *bfd-liveness*
Description When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency.
When configured to **false**, this command removes BFD from the associated protocol adjacency.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [[interface-name](#)] *interface-name*

Synopsis	Enter the neighbor list instance
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i>
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	IP interface name
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i>
Tree	neighbor
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication password passed between RIP neighbors
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 102
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes per RIP update message
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Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive keyword

Synopsis	Accepted version on received packets
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIP version and method used to send RIP updates
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> send <i>keyword</i>
Tree	send
Options	none, version-1, broadcast, multicast, unicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure service vpn <i>service-name</i> rip group <i>named-item</i> neighbor <i>interface-name</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** *service vprn* *service-name rip* *group named-item neighbor* *interface-name timers update number*

Tree *update*

Range 1 to 600

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

unicast-address [*address*] *ipv4-unicast-address*

Synopsis Add a list entry for **unicast-address**

Context **configure** *service vprn* *service-name rip* *group named-item neighbor* *interface-name unicast-address ipv4-unicast-address*

Tree *unicast-address*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[address] *ipv4-unicast-address*

Synopsis Unicast IPv6 address for the neighbor

Context **configure** *service vprn* *service-name rip* *group named-item neighbor* *interface-name unicast-address ipv4-unicast-address*

Tree *unicast-address*

String format 'ipv4-address' must use only digits and dots (no %zone)
'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> send <i>keyword</i>
Tree	send
Options	none, version-1, broadcast, multicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	When configured to true , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timers

Synopsis Enable the **timers** context
Context **configure** [service vprn](#) *service-name* [rip group](#) *named-item* [timers](#)
Tree [timers](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

flush number

Synopsis RIP flush timer
Context **configure** [service vprn](#) *service-name* [rip group](#) *named-item* [timers](#) [flush](#) *number*
Tree [flush](#)
Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range 1 to 1200
Units seconds
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

timeout number

Synopsis RIP timeout timer
Context **configure** [service vprn](#) *service-name* [rip group](#) *named-item* [timers](#) [timeout](#) *number*
Tree [timeout](#)
Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn <i>service-name</i> rip group <i>named-item</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure service vprn <i>service-name</i> rip import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the RIP message
Context	configure service vprn <i>service-name</i> rip message-size <i>number</i>
Tree	message-size
Range	25 to 255

Default	25
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure service vprn <i>service-name</i> rip metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure service vprn <i>service-name</i> rip metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>service-name</i> rip preference <i>number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate-metric *boolean*

Synopsis	Enable the BGP MED used to configure the RIP metric
Context	configure <i>service vprn service-name rip propagate-metric boolean</i>
Tree	<i>propagate-metric</i>
Description	<p>When configured to true, this command enables the BGP MED to be used to configure the RIP metric at the BGP to RIP transition on egress routers.</p> <p>When configured to false, this command sets the RIP metric to the optional value configured with the metric-out command plus one.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure <i>service vprn service-name rip receive keyword</i>
Tree	<i>receive</i>
Options	version-1, version-2, both, none
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure <i>service vprn service-name rip send keyword</i>
Tree	<i>send</i>
Options	none, version-1, broadcast, multicast
Default	broadcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>service-name</i> rip split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>service-name</i> rip timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure service vprn <i>service-name</i> rip timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

timeout *number*

Synopsis RIP timeout timer

Context **configure** [service vprn](#) *service-name* [rip timers](#) **timeout** *number*

Tree [timeout](#)

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** [service vprn](#) *service-name* [rip timers](#) **update** *number*

Tree [update](#)

Range 1 to 600

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ripng

Synopsis Enable the **ripng** context

Context **configure** [service vprn](#) *service-name* [ripng](#)

Tree [ripng](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	configure service vprn <i>service-name</i> ripng admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>service-name</i> ripng bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>service-name</i> ripng check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> ripng description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-limit

Synopsis	Enable the export-limit context
Context	configure service vprn <i>service-name</i> ripng export-limit
Tree	export-limit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure service vprn <i>service-name</i> ripng export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure service vprn <i>service-name</i> ripng export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

export-policy *reference*

Synopsis Policies to determine exported routes

Context **configure** [service vprn](#) *service-name* [ripng export-policy](#) *reference*

Tree [export-policy](#)

Reference **configure** [policy-options policy-statement](#) *named-item-64*

Max. instances 5

Notes This element is ordered by the user.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

group [[group-name](#)] *named-item*

Synopsis Enter the **group** list instance

Context **configure** [service vprn](#) *service-name* [ripng group](#) *named-item*

Tree [group](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[group-name] *named-item*

Synopsis RIP group name

Context **configure** [service vprn](#) *service-name* [ripng group](#) *named-item*

Tree [group](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of RIPvng neighbor interface group
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> check-zero <i>boolean</i>
Tree	check-zero
Description	<p>When configured to true, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.</p> <p>When configured to false, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command specifies the export route policies used to determine which routes are exported to RIP.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	configure policy-options policy-statement <i>named-item-64</i>

Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure service vprn service-name ripng group named-item message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure service vprn service-name ripng group named-item metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure service vprn service-name ripng group named-item metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neighbor [[interface-name](#)] *reference*

Synopsis	Enter the neighbor list instance
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i>
Tree	neighbor
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[interface-name] *reference*

Synopsis	IP interface name
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i>
Tree	neighbor
Reference	configure service vpn <i>service-name</i> interface <i>interface-name</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> export-policy <i>reference</i>
Tree	export-policy

Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> receive <i>keyword</i>
Tree	receive

Options	none, ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIPng version and method used to send RIPng updates
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> send <i>keyword</i>
Tree	send
Options	none, ripng, unicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> timers
Tree	timers
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

flush *number*

Synopsis RIP flush timer

Context **configure** [service vprn](#) *service-name* [ripng group](#) *named-item* [neighbor](#) *reference* [timers](#) [flush](#) *number*

Tree [flush](#)

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

timeout *number*

Synopsis RIP timeout timer

Context **configure** [service vprn](#) *service-name* [ripng group](#) *named-item* [neighbor](#) *reference* [timers](#) [timeout](#) *number*

Tree [timeout](#)

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** [service vprn](#) *service-name* [ripng group](#) *named-item* [neighbor](#) *reference* [timers](#) [update](#) *number*

Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

unicast-address [[address](#)] *ipv6-unicast-address*

Synopsis	Add a list entry for unicast-address
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> unicast-address <i>ipv6-unicast-address</i>
Tree	unicast-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] *ipv6-unicast-address*

Synopsis	Unicast IPv6 address for the neighbor
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> neighbor <i>reference</i> unicast-address <i>ipv6-unicast-address</i>
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive keyword

Synopsis	Accepted version on received packets
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> receive <i>keyword</i>
Tree	receive
Options	none, ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIPng version and method used to send RIPng updates
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> send <i>keyword</i>
Tree	send
Options	none, ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>service-name</i> ripng group <i>named-item</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
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Context	configure <i>service vprn service-name ripng group named-item timers</i>
Tree	<i>timers</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure <i>service vprn service-name ripng group named-item timers flush number</i>
Tree	<i>flush</i>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>service vprn service-name ripng group named-item timers timeout number</i>
Tree	<i>timeout</i>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
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Context	configure service vpn <i>service-name</i> ripng group <i>named-item</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure service vpn <i>service-name</i> ripng import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>named-item-64</i>
Max. instances	5
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure service vpn <i>service-name</i> ripng message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure service vpn <i>service-name</i> ripng metric-in <i>number</i>
Tree	metric-in

Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure service vprn <i>service-name</i> ripng metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Route preference
Context	configure service vprn <i>service-name</i> ripng preference <i>number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure service vprn <i>service-name</i> ripng receive <i>keyword</i>
Tree	receive
Options	none, ripng
Default	ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	RIPng version and method used to send RIPng updates
Context	configure service vprn <i>service-name</i> ripng send <i>keyword</i>
Tree	send
Options	none, ripng
Default	ripng
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure service vprn <i>service-name</i> ripng split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timers

Synopsis	Enable the timers context
Context	configure service vprn <i>service-name</i> ripng timers
Tree	timers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flush *number*

Synopsis	RIP flush timer
Context	configure service vprn <i>service-name</i> ripng timers flush <i>number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	RIP timeout timer
Context	configure service vprn <i>service-name</i> ripng timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure service vprn <i>service-name</i> ripng timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-id *router-id*

Synopsis	Unique router ID for the router in the AS
Context	configure service <i>vpn</i> <i>service-name</i> router-id <i>router-id</i>
Tree	router-id
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure service <i>vpn</i> <i>service-name</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sfm-overload

Synopsis	Enable the sfm-overload context
Context	configure service <i>vpn</i> <i>service-name</i> sfm-overload
Tree	sfm-overload
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	configure service vprn <i>service-name</i> sfm-overload holdoff-time <i>number</i>
Tree	holdoff-time
Range	1 to 600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sgt-qos

Synopsis	Enter the sgt-qos context
Context	configure service vprn <i>service-name</i> sgt-qos
Tree	sgt-qos
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p

Synopsis	Enter the dot1p context
Context	configure service vprn <i>service-name</i> sgt-qos dot1p
Tree	dot1p
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

application [[dot1p-app-name](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure service vprn <i>service-name</i> sgt-qos dot1p application <i>keyword</i>
Tree	application
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dot1p-app-name] keyword

Synopsis	Dot1p application ID that generates control traffic
Context	configure service vprn <i>service-name</i> sgt-qos dot1p application <i>keyword</i>
Tree	application
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p (keyword | number)

Synopsis	Dot1p value to the traffic generated by this application
Context	configure service vprn <i>service-name</i> sgt-qos dot1p application <i>keyword dot1p (keyword number)</i>
Tree	dot1p
Range	0 to 7
Options	be – Best Effort l2 – Low 2 (best effort) af – Assured Forwarding (assured) l1 – Low 1 (assured) h2 – High 2 (high priority) ef – Expedited Forwarding (high priority) h1 – High 1 (high priority) nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp

Synopsis	Enter the dscp context
Context	configure service vprn <i>service-name</i> sgt-qos dscp
Tree	dscp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

application [**dscp-app-name**] *keyword*

Synopsis	Enter the application list instance
Context	configure service vprn <i>service-name</i> sgt-qos dscp application <i>keyword</i>
Tree	application
Description	<p>Commands in this context configure DSCP remarking for self-generated application traffic.</p> <p>All packets generated by the configured application instance use the value configured for the DSCP name or value. The instance can be Base, router, VPRN, or management.</p> <p>The system uses the DSCP value configured in this instance to:</p> <ul style="list-style-type: none"> • set the DSCP bits in the IP packet • signal from the CPM to the egress FC QoS policy to set the Ethernet 802.1p and MPLS EXP bits including, PPPoE, and IS-IS packets that do not carry DSCP bits • configure the DSCP value in the egress IP header (which the egress QoS policy does not overwrite)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dscp-app-name] *keyword*

Synopsis	DSCP application ID that generates control traffic
Context	configure service vprn <i>service-name</i> sgt-qos dscp application <i>keyword</i>
Tree	application
Description	This command configures the DSCP application ID that generates control traffic.
Options	bgp, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, gtp, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, pfcp, ibcp, bfd
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	configure service vprn <i>service-name</i> sgt-qos dscp application <i>keyword</i> dscp (<i>keyword</i> <i>number</i>)
Tree	dscp

Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dscp-map [[dscp-name](#)] *keyword*

Synopsis	Enter the dscp-map list instance
Context	configure service vpn <i>service-name</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[dscp-name] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	configure service vpn <i>service-name</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fc *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	configure service vpn <i>service-name</i> sgt-qos dscp dscp-map <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be – Best Effort l2 – Low 2 (best effort)

	af – Assured Forwarding (assured)
	l1 – Low 1 (assured)
	h2 – High 2 (high priority)
	ef – Expedited Forwarding (high priority)
	h1 – High 1 (high priority)
	nc – Network Control (high priority)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp

Synopsis	Enter the snmp context
Context	configure service vprn <i>service-name</i> snmp
Tree	snmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access *boolean*

Synopsis	Enable SNMP access for the VPRN service
Context	configure service vprn <i>service-name</i> snmp access <i>boolean</i>
Tree	access
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community [[community-string](#)] *encrypted-leaf*

Synopsis	Enter the community list instance
Context	configure service vprn <i>service-name</i> snmp community <i>encrypted-leaf</i>
Tree	community
Description	<p>Commands in this context set the SNMP community names to be used with the associated VPRN instance. These VPRN community names are used to associate SNMP v1/v2c requests with a particular VPRN context and to return a reply that contains VPRN-specific data or limit SNMP access to data in a specific VPRN instance.</p> <p>VPRN SNMP communities configured with an access permission of 'r' are automatically associated with the default access group "snmp-vprn-ro" and the "vprn-view" view (read only). VPRN SNMP communities configured with an access permission of 'rw' are</p>

automatically associated with the default access group "snmp-vprn" and the "vprn-view" view (read/write).

The community in an SNMP v1/v2 request determines the SNMP context (that is, the VPRN number for accessing SNMP tables) and not the VPRN of the incoming interface on which the request was received. For example, when an SNMP request arrives on VPRN 5 interface "ringo" with a destination IP address equal to the "ringo" interface, but the community in the SNMP request is the community configured against VPRN 101, the SNMP request is processed using the VPRN 101 context. (the response contains information about VPRN 101). Nokia recommends avoiding the use of a simple series of VPRN SNMP community values that are similar to each other (for example, avoid my-vprncomm-1, my-vprn-comm-2, and so on).

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[community-string] *encrypted-leaf*

Synopsis SNMP v1/v2c community name associated with the VPRN

Context **configure** [service vprn](#) *service-name* [snmp community](#) *encrypted-leaf*

Tree [community](#)

Description This command specifies the SNMP v1/v2c community name associated with the VPRN in a protected format.

The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 166

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

access-permissions *keyword*

Synopsis Access permissions to MIB objects

Context **configure** [service vprn](#) *service-name* [snmp community](#) *encrypted-leaf* [access-permissions](#) *keyword*

Tree [access-permissions](#)

Options r, rw

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

source-access-list *reference*

Synopsis	List name used to validate the source IP address
Context	configure service vprn <i>service-name</i> snmp community <i>encrypted-leaf</i> source-access-list reference
Tree	source-access-list
Description	This command specifies the SNMP source access list to use with the SNMP community. The source access list is used to validate the source IP address of all received SNMP requests that use the community.
Reference	configure system security snmp source-access-list <i>string-not-all-spaces</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	SNMP version
Context	configure service vprn <i>service-name</i> snmp community <i>encrypted-leaf</i> version <i>keyword</i>
Tree	version
Options	v1, v2c, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure service vprn <i>service-name</i> source-address
Tree	source-address
Description	Commands in this context configure the source address and application to use in all unsolicited packets.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 [[application](#)] *keyword*

Synopsis	Enter the ipv4 list instance
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Context	configure <i>service vpn</i> <i>service-name</i> <i>source-address</i> <i>ipv4</i> <i>keyword</i>
Tree	<i>ipv4</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**application**] *keyword*

Synopsis	Application that sets the source IPv4 address
Context	configure <i>service vpn</i> <i>service-name</i> <i>source-address</i> <i>ipv4</i> <i>keyword</i>
Tree	<i>ipv4</i>
Options	telnet – Telnet packets ssh – SSH packets radius – RADIUS packets tacplus – TACACS+ packets snmptrap – SNMP trap packets syslog – Syslog packets ping – ICMP Echo Reply messages traceroute – Traceroute reply messages ntp – NTP packets cflowd – Cflowd packets ptp – PTP packets icmp-error – ICMP error messages
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-address*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 source address for the application
Context	configure <i>service vpn</i> <i>service-name</i> <i>source-address</i> <i>ipv4</i> <i>keyword</i> address <i>ipv4-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interface-name *interface-name*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	configure service vpn <i>service-name</i> source-address ipv4 <i>keyword</i> interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 [**application**] *keyword*

Synopsis	Enter the ipv6 list instance
Context	configure service vpn <i>service-name</i> source-address ipv6 <i>keyword</i>
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[application] *keyword*

Synopsis	Application that sets the source IPv6 address
Context	configure service vpn <i>service-name</i> source-address ipv6 <i>keyword</i>
Tree	ipv6
Options	telnet – Telnet packets radius – RADIUS packets tacplus – TACACS+ packets snmptrap – SNMP trap packets syslog – Syslog packets ping – ICMPv6 Echo Reply messages traceroute – Traceroute reply messages cflowd – Cflowd packets ntp – NTP packets

	icmp6-error – ICMPv6 error messages ssh – SSH packets ptp – PTP packets
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-address*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 source address for the application
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>source-address</i> <i>ipv6</i> <i>keyword</i> address <i>ipv6-address</i>
Tree	<i>address</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

spoke-sdp [*sdp-bind-id*] *sdp-bind-id*

Synopsis	Enter the spoke-sdp list instance
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i>
Tree	<i>spoke-sdp</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[sdp-bind-id] *sdp-bind-id*

Synopsis	SDP binding ID
Context	configure <i>service</i> <i>vprn</i> <i>service-name</i> <i>spoke-sdp</i> <i>sdp-bind-id</i>
Tree	<i>spoke-sdp</i>
String length	3 to 16
String format	'sdp-bind-id' must be sdp-id:vc-id (sdp 1..32767, vc 1..4294967295)
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> spoke-sdp <i>sdp-bind-id</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-routes

Synopsis	Enter the static-routes context
Context	configure service vprn <i>service-name</i> static-routes
Tree	static-routes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down

Synopsis	Enable the hold-down context
Context	configure service vprn <i>service-name</i> static-routes hold-down
Tree	hold-down
Description	<p>Commands in this context enable the hold-down time feature globally for static routes in the system.</p> <p>The static route hold-down time is a mechanism to protect from rapid, fluctuating state changes of static routes resulting from issues with reachability because of link flap.</p> <p>The commands in this context apply to all static routes in the VPRN and the base router instance in which this hold-down time is configured in.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial number

Synopsis	Value for the initial hold-down time
Context	configure service vpn <i>service-name</i> static-routes hold-down initial <i>number</i>
Tree	initial
Description	<p>This command specifies the initial value of the hold-down time globally for static routes in the system.</p> <p>When a static route is ready to become active, it remains inactive for the hold-down time before activating the static-route. If, during this hold-down period, the static route becomes inactive again because of factors such as interface failure, the hold-down timer is reset, effectively postponing the activation of the route until the next opportunity.</p>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-value number

Synopsis	Maximum value of the hold-down time
Context	configure service vpn <i>service-name</i> static-routes hold-down max-value <i>number</i>
Tree	max-value
Description	This command specifies the maximum value of the hold-down time globally for static routes in the system.
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multiplier number

Synopsis	Multiplier of the previous hold-down time
Context	configure service vpn <i>service-name</i> static-routes hold-down multiplier <i>number</i>
Tree	multiplier
Description	This command specifies the multiplier value by which the previous hold-down time is multiplied to calculate the new one. This value applies globally for static routes in the system.
Range	1 to 10

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *route-type* *keyword*

Synopsis	Enter the route list instance
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>static-routes</i> <i>route</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>route-type</i> <i>keyword</i>
Tree	<i>route</i>
Description	<p>Commands in this context create a static route entry. A prefix and netmask must be specified.</p> <p>After the static route context for the specified prefix and netmask has been created, additional options associated with the static route or routes may be specified through the inclusion of additional static route commands.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>static-routes</i> <i>route</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>route-type</i> <i>keyword</i>
Tree	<i>route</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-type *keyword*

Synopsis	Static route type
Context	configure <i>service</i> <i>vpn</i> <i>service-name</i> <i>static-routes</i> <i>route</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>route-type</i> <i>keyword</i>
Tree	<i>route</i>
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

blackhole

Synopsis Enable the **blackhole** context

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole**

Tree **blackhole**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the static route operation

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

community *community*

Synopsis Community ID associated with the static route

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **community** *community*

Tree **community**

Description This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.

If at least one community is specified at the prefix level of the static route entry, this command is ignored.

String length 1 to 72

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages when received packets match a static route with black-hole next-hop
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole generate-icmp <i>boolean</i>
Tree	generate-icmp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list flag <i>keyword</i>
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Prefix list name
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Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance used for matching prefix list
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole prefix-list router-instance <i>string</i>
Tree	router-instance
Description	<p>This command configures the router instance used for matching against the prefix list. If the conditional static route is configured in a VPRN and the router instance is configured as "Base", the activation of the static route is dependent on the existence of routes in the Base router and the evaluation of the prefix list and flag is done in that context.</p> <p>By default there is no configured value for this command option, and the conditional static route is dependent on the existence of routes in the same router instance as the static route itself, subject to the details of the prefix list and the flag setting.</p> <p>Entries in a referenced prefix list that are not match type 'exact' are interpreted as though they are 'exact'.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole tag <i>number</i>
Tree	tag
Description	<p>This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols.</p> <p>If a tag is specified at the prefix level of the static route entry, this command is ignored.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> community <i>community</i>
Tree	community
String length	1 to 72
Max. instances	12
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-next-hop [*interface-name*] *interface-name*

Synopsis	Enter the dhcp-next-hop list instance
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> dhcp-next-hop <i>interface-name</i>
Tree	dhcp-next-hop
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis	Router interface name.
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> dhcp-next-hop <i>interface-name</i>
Tree	dhcp-next-hop
String length	1 to 32
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
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Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop interface-name admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop interface-name community community
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop interface-name description description-allow-all-white-spaces
Tree	description
String length	1 to 80
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword dhcp-next-hop interface-name metric number

Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

preference number

Synopsis	Priority of static route over different route sources
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> dhcp-next-hop <i>interface-name</i> preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

tag number

Synopsis	Static route tag
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> dhcp-next-hop <i>interface-name</i> tag <i>number</i>
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

grt

Synopsis	Enable the grt context
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> grt
Tree	grt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> grt admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> grt description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> grt metric <i>number</i>
Tree	metric

Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

indirect [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the indirect list instance
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community <i>community</i>
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpe-check [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check

Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

interval *number*

Synopsis Interval between ICMP pings to target CPE IP address

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **interval** *number*

Tree **interval**

Range 1 to 255

Units seconds

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

log *boolean*

Synopsis Log CPE connectivity checks transitions

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **log** *boolean*

Tree **log**

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

padding-size *number*

Synopsis Padding size for CPE connectivity checks

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **padding-size** *number*

Tree **padding-size**

Range 0 to 16384

Units bytes

Default 56

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis Text description

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **description** *description-allow-all-white-spaces*

Tree **description**

String length 1 to 80

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

metric *number*

Synopsis Static route metric

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **metric** *number*

Tree **metric**

Description This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.

Range 0 to 65535

Default 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

preference *number*

Synopsis Priority of static route over different route sources

Context **configure** **service** **vpn** *service-name* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **preference** *number*

Tree **preference**

Description This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.

Range 1 to 255

Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list flag <i>keyword</i>
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name reference

Synopsis	Prefix list name
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance used for matching prefix list
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list router-instance <i>string</i>
Tree	router-instance
Description	<p>This command configures the router instance used for matching against the prefix list. If the conditional static route is configured in a VPRN and the router instance is configured as "Base", the activation of the static route is dependent on the existence of routes in the Base router and the evaluation of the prefix list and flag is done in that context.</p> <p>By default there is no configured value for this command option, and the conditional static route is dependent on the existence of routes in the same router instance as the static route itself, subject to the details of the prefix list and the flag setting.</p> <p>Entries in a referenced prefix list that are not match type 'exact' are interpreted as though they are 'exact'.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tag <i>number</i>
Tree	tag
Description	<p>This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols.</p> <p>If a tag is specified at the prefix level of the static route entry, this command is ignored.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface [**interface-name**] *interface-name*

Synopsis	Enter the interface list instance
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i>
Tree	interface

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[interface-name] *interface-name*

Synopsis Router interface name
 Context **configure** **service vprn** *service-name* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword interface** *interface-name*
 Tree **interface**
 String length 1 to 32
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the static route operation
 Context **configure** **service vprn** *service-name* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword interface** *interface-name* **admin-state** *keyword*
 Tree **admin-state**
 Options enable, disable
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

community *community*

Synopsis Community ID associated with the static route
 Context **configure** **service vprn** *service-name* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword interface** *interface-name* **community** *community*
 Tree **community**
 Description This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.
 If at least one community is specified at the prefix level of the static route entry, this command is ignored.
 String length 1 to 72
 Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cpe-check [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p>
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
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Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag *keyword*

Synopsis	Static route match condition from prefix list
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Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> prefix-list flag <i>keyword</i>
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

Synopsis	Prefix list name
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance used for matching prefix list
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> prefix-list router-instance <i>string</i>
Tree	router-instance
Description	<p>This command configures the router instance used for matching against the prefix list. If the conditional static route is configured in a VPRN and the router instance is configured as "Base", the activation of the static route is dependent on the existence of routes in the Base router and the evaluation of the prefix list and flag is done in that context.</p> <p>By default there is no configured value for this command option, and the conditional static route is dependent on the existence of routes in the same router instance as the static route itself, subject to the details of the prefix list and the flag setting.</p> <p>Entries in a referenced prefix list that are not match type 'exact' are interpreted as though they are 'exact'.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag number

Synopsis	Static route tag
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>interface-name</i> tag number
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipsec-tunnel [ipsec-tunnel-name] named-item

Synopsis	Enter the ipsec-tunnel list instance
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ipsec-tunnel-name] named-item

Synopsis	IPsec tunnel name
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i>
Tree	ipsec-tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i> community <i>community</i>
Tree	community
Description	<p>This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route.</p> <p>If at least one community is specified at the prefix level of the static route entry, this command is ignored.</p>
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i> description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i> metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i> preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>named-item</i> tag <i>number</i>
Tree	tag
Description	This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols. If a tag is specified at the prefix level of the static route entry, this command is ignored.
Range	1 to 4294967295

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

next-hop [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **next-hop** list instance

Context **configure** [service](#) [vpn](#) *service-name* [static-routes](#) [route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) *keyword* [next-hop](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree [next-hop](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Next-hop IP address used to reach the destination

Context **configure** [service](#) [vpn](#) *service-name* [static-routes](#) [route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) *keyword* [next-hop](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree [next-hop](#)

String format 'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id
 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the static route operation

Context **configure** [service](#) [vpn](#) *service-name* [static-routes](#) [route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) *keyword* [next-hop](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness boolean
Tree	bfd-liveness
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

community *community*

Synopsis	Community ID associated with the static route
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) community community
Tree	community
Description	This command associates one BGP community (standard, extended, or large) with a next hop of the static route. This community can be matched in route policies and automatically added to BGP routes that are created from the static route. If at least one community is specified at the prefix level of the static route entry, this command is ignored.
String length	1 to 72
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpe-check [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Units	bytes
Default	56
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description-allow-all-white-spaces*

Synopsis	Text description
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>description-allow-all-white-spaces</i>
Tree	description
String length	1 to 80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

metric *number*

Synopsis	Static route metric
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) metric <i>number</i>
Tree	metric
Description	This command configures the cost metric for the static route, expressed as a decimal integer. If there are multiple static routes with the same preference but different metrics, the lower cost (metric) route is installed.
Range	0 to 65535
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preference *number*

Synopsis	Priority of static route over different route sources
Context	configure service vpn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference <i>number</i>
Tree	preference
Description	This command specifies the route preference to be assigned to the associated static route. The lower the preference value the more preferred the route is considered.
Range	1 to 255
Default	5

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-list

Synopsis	Enter the prefix-list context
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list
Tree	prefix-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list flag <i>keyword</i>
Tree	flag
Options	any, all, none
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name reference

Synopsis	Prefix list name
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>named-item-64</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance used for matching prefix list
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list router-instance <i>string</i>
Tree	router-instance
Description	<p>This command configures the router instance used for matching against the prefix list. If the conditional static route is configured in a VPRN and the router instance is configured as "Base", the activation of the static route is dependent on the existence of routes in the Base router and the evaluation of the prefix list and flag is done in that context.</p> <p>By default there is no configured value for this command option, and the conditional static route is dependent on the existence of routes in the same router instance as the static route itself, subject to the details of the prefix list and the flag setting.</p> <p>Entries in a referenced prefix list that are not match type 'exact' are interpreted as though they are 'exact'.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tag <i>number</i>
Tree	tag
Description	<p>This command associates a 4-byte route-tag with the static route. The tag value can be used in route policies to control distribution of the static route into other protocols.</p> <p>If a tag is specified at the prefix level of the static route entry, this command is ignored.</p>
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate-next-hop *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) validate-next-hop <i>boolean</i>
Tree	validate-next-hop

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tag *number*

Synopsis	Static route tag
Context	configure service vprn <i>service-name</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-propagate

Synopsis	Enter the ttl-propagate context
Context	configure service vprn <i>service-name</i> ttl-propagate
Tree	ttl-propagate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local *keyword*

Synopsis	Local TTL propagation control for the VPRN
Context	configure service vprn <i>service-name</i> ttl-propagate local <i>keyword</i>
Tree	local
Description	This command specifies the local TTL propagation control for the VPRN and overrides the global configuration of the TTL propagation for locally generated packets that are forwarded over MPLS LSPs in a given VPRN service context.
Options	none, all, vc-only, use-base
Default	use-base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transit keyword

Synopsis	Transit TTL propagation control for the VPRN
Context	configure service vprn <i>service-name</i> ttl-propagate transit <i>keyword</i>
Tree	transit
Description	This command overrides the global configuration of the TTL propagation for in transit packets that are forwarded over MPLS LSPs in a given VPRN service context.
Options	none, all, vc-only, use-base
Default	use-base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

twamp-light

Synopsis	Enter the twamp-light context
Context	configure service vprn <i>service-name</i> twamp-light
Tree	twamp-light
Description	Commands in this context configure TWAMP Light parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

reflector

Synopsis	Enable the reflector context
Context	configure service vprn <i>service-name</i> twamp-light reflector
Tree	reflector
Description	Commands in this context configure TWAMP Light session reflector options and enable TWAMP Light functionality.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of the TWAMP Light reflector
Context	configure service vprn <i>service-name</i> twamp-light reflector admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ipv6-udp-checksum-zero *boolean*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure service vprn <i>service-name</i> twamp-light reflector allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, the router processes IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.</p> <p>When configured to false, the router discards IPv6 packets that arrive with a UDP checksum of zero.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> twamp-light reflector description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure service vprn <i>service-name</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Description	Commands in this context configure which TWAMP Light packet prefixes the reflector processes.
Max. instances	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	configure service vprn <i>service-name</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure service vprn <i>service-name</i> twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Processing behavior type for the reflector
Context	configure <i>service vprn service-name twamp-light reflector type keyword</i>
Tree	<i>type</i>
Description	<p>This command configures the processing behavior of the TWAMP Light reflector.</p> <p>When the value is twamp-light the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is stamp, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to stamp. When the reflector is operating in stamp mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Options	stamp – Reflector finds and processes supported STAMP TLVs twamp-light – Reflector does not check received PDU
Default	twamp-light
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

udp-port number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	configure <i>service vprn service-name twamp-light reflector udp-port number</i>
Tree	<i>udp-port</i>
Range	862 64364 to 64373
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn-type keyword



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPRN type
Context	configure service vprn <i>service-name</i> vprn-type <i>keyword</i>
Tree	vprn-type
Options	regular, hub, spoke, subscriber-split-horizon
Default	regular
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weighted-ecmp keyword

Synopsis	Weighted load-balancing capability for ECMP routes
Context	configure service vprn <i>service-name</i> weighted-ecmp <i>keyword</i>
Tree	weighted-ecmp
Options	false, true, strict
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.28 subscriber-mgmt commands

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configure
- subscriber-mgmt
- apply-groups reference
- apply-groups-exclude reference
- local-user-db named-item
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description description
- ipoe
- host named-item
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- authentication
- host-identification
- circuit-id
- ascii-string string
- hex-string hex-string
- duid-en
- hex-string hex-string
- duid-ll-llt mac-unicast-address-no-zero
- mac mac-unicast-address-no-zero
- option60
- ascii-string named-item
- hex-string hex-string
- remote-id
- ascii-string string
- hex-string hex-string
- sap-id display-string
- service-id number
- string display-string
- system-id display-string
- ipv4
- address
- gi-address keyword
- ip-address ipv4-unicast-address
- pool
- delimiter string
- primary named-item
- secondary named-item
- use-pool-from-client
- delimiter string
- gi-address ipv4-unicast-address
- option (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- ascii-string string-not-all-spaces
- duration number
- empty
- hex-string hex-string
- ipv4-address ipv4-address
- netbios-node-type keyword
- mask type keyword
- apply-groups reference
- apply-groups-exclude reference
- prefix
- length number
- string string

```

configure subscriber-mgmt local-user-db ipoe mask suffix

- **suffix**
 - **length** *number*
 - **string** *string*
 - **match-list** *keyword*
- **rip-policy** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *encrypted-leaf*
 - **authentication-type** *keyword*
 - **description** *description*

4.28.1 subscriber-mgmt command descriptions

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure subscriber-mgmt
Tree	subscriber-mgmt
Description	Commands in this context configure subscriber management attributes, policies, and profiles.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-user-db [[name](#)] *named-item*

Synopsis	Enter the local-user-db list instance
Context	configure subscriber-mgmt local-user-db <i>named-item</i>
Tree	local-user-db
Max. instances	127
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[\[name\]](#) *named-item*

Synopsis	Local user database name
Context	configure subscriber-mgmt local-user-db <i>named-item</i>
Tree	local-user-db
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the local user database
Context	configure subscriber-mgmt local-user-db <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure subscriber-mgmt local-user-db <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipoe

Synopsis	Enter the ipoe context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe
Tree	ipoe
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host [[host-name](#)] *named-item*

Synopsis	Enter the host list instance
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i>
Tree	host
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[host-name] *named-item*

Synopsis	Host name
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i>
Tree	host
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the host
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication

Synopsis	Enter the authentication context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> authentication
Tree	authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-identification

Synopsis	Enter the host-identification context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification

Tree	host-identification
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

circuit-id

Synopsis	Enter the circuit-id context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification circuit-id
Tree	circuit-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as ASCII string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification circuit-id ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 127
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification circuit-id hex-string <i>hex-string</i>
Tree	hex-string

String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid-en

Synopsis	Enter the duid-en context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification duid-en
Tree	duid-en
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client ID of type duid-en as a hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification duid-en hex-string <i>hex-string</i>
Tree	hex-string
Description	This command configures the hexadecimal value for use in matching against the concatenation of the enterprise number and identifier fields of the DHCPv6 option CLIENTID (1) with DUID type = 2 (assigned by the vendor based on the enterprise number) in the DHCPv6 client message.
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duid-II-III *mac-unicast-address-no-zero***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address of the Client ID type duid-II or duid-III
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification duid-II-III <i>mac-unicast-address-no-zero</i>
Tree	duid-II-III
Description	This command configures the value for use in matching against the link-layer address field of the DHCPv6 option CLIENTID (1) with DUID type = 3 (based on the link-layer address) or DUID type = 1 (based on the link-layer address plus time) and hardware type = 1 (Ethernet) in the DHCPv6 client message. For DUID type = 1, the time field is ignored.
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac *mac-unicast-address-no-zero***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification mac <i>mac-unicast-address-no-zero</i>
Tree	mac
String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option60

Synopsis	Enter the option60 context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification option60
Tree	option60

Introduced25.3.R2

Platforms7705 SAR Gen 2

ascii-string *named-item*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisOption 60 as ASCII string

Context**configure** [subscriber-mgmt](#) [local-user-db](#) *named-item* [ipoe](#) [host](#) *named-item* [host-identification](#) [option60](#) **ascii-string** *named-item*

Tree[ascii-string](#)

String length1 to 32

String format'string-not-all-spaces' must contain at least one non-space character

NotesThe following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced25.3.R2

Platforms7705 SAR Gen 2

hex-string *hex-string*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisOption as a hexadecimal string

Context**configure** [subscriber-mgmt](#) [local-user-db](#) *named-item* [ipoe](#) [host](#) *named-item* [host-identification](#) [option60](#) **hex-string** *hex-string*

Tree[hex-string](#)

String length1 to 64

String format'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)

NotesThe following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced25.3.R2

Platforms7705 SAR Gen 2

remote-id

Synopsis	Enter the remote-id context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification remote-id
Tree	remote-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification remote-id ascii-string <i>string</i>
Tree	ascii-string
String length	1 to 255
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification remote-id hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 512
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a choice: ascii-string or hex-string .

Introduced25.3.R2

Platforms7705 SAR Gen 2

sap-id *display-string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisSAP ID

Context**configure** subscriber-mgmt local-user-db *named-item* ipoe host *named-item* host-identification sap-id *display-string*

Tree*sap-id*

String length1 to 255

Introduced25.3.R2

Platforms7705 SAR Gen 2

service-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisService ID

Context**configure** subscriber-mgmt local-user-db *named-item* ipoe host *named-item* host-identification service-id *number*

Tree*service-id*

Range1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386 | 2148278387 to 2148282482 | 2148282483 to 2148282486

Introduced25.3.R2

Platforms7705 SAR Gen 2

string *display-string*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSO string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification string <i>display-string</i>
Tree	string
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-id *display-string*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> host-identification system-id <i>display-string</i>
Tree	system-id
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enter the ipv4 context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address

Synopsis	Enter the address context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address
Tree	address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gi-address *keyword*

Synopsis	Use gi-address to select a pool with the given scope
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address gi-address <i>keyword</i>
Tree	gi-address
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-address *ipv4-unicast-address*

Synopsis	Fixed IPv4 address of the host
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address ip-address <i>ipv4-unicast-address</i>
Tree	ip-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pool

Synopsis	Enable the pool context
----------	--------------------------------

Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address pool
Tree	pool
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delimiter *string*

Synopsis	Delimiter separating primary and secondary pool names
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address pool delimiter <i>string</i>
Tree	delimiter
String length	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary *named-item*

Synopsis	Primary pool name
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address pool primary <i>named-item</i>
Tree	primary
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary *named-item*

Synopsis	Secondary pool name
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address pool secondary <i>named-item</i>
Tree	secondary

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address use-pool-from-client
Tree	use-pool-from-client
Notes	The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delimiter *string*

Synopsis	Delimiter character to combine primary and secondary pool names
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 address use-pool-from-client delimiter <i>string</i>
Tree	delimiter
String length	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gi-address *ipv4-unicast-address*

Synopsis	GI addresses based on the host entry in the LUDB
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 gi-address ipv4-unicast-address
Tree	gi-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[number] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ascii-string *string-not-all-spaces*

Synopsis	DHCP option specified as an ASCII string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>) ascii-string <i>string-not-all-spaces</i>
Tree	ascii-string
String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

duration *number*

Synopsis	DHCP option as time duration
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

empty

Synopsis	Remove DHCP option configuration
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hex-string *hex-string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>) hex-string <i>hex-string</i>
Tree	hex-string
String length	1 to 256
String format	'hex-string' must be hexadecimal with prefix 0x (e.g. 0x1a2b)
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-address *ipv4-address*

Synopsis	DHCP option as a list of IPv4 addresses
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>) ipv4-address <i>ipv4-address</i>
Tree	ipv4-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Max. instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netbios-node-type *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe host <i>named-item</i> ipv4 option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask [type](#) *keyword*

Synopsis	Enter the mask list instance
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i>
Tree	mask
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Matching type to identify a host
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i>
Tree	mask
Description	This command configures the data type that represents the type of matching performed to identify a DHCP host.
Options	circuit-id, remote-id, sap-id, string, system-id, option60, duid-en, duid-II-Ilt
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix

Synopsis	Enable the prefix context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i> prefix
Tree	prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length number

Synopsis	PPP mask prefix length
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i> prefix length <i>number</i>
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string string

Synopsis	Prefix string
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i> prefix string <i>string</i>

Tree	string
String length	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

suffix

Synopsis	Enable the suffix context
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i> suffix
Tree	suffix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length *number*

Synopsis	PPP mask suffix length
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i> suffix length <i>number</i>
Tree	length
Range	1 to 127
Notes	The following elements are part of a mandatory choice: length or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

string *string*

Synopsis	Suffix substring
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe mask type <i>keyword</i> suffix string <i>string</i>
Tree	string
Description	This command specifies a substring that is stripped off the end of the incoming circuit ID before it is matched against the value configured in the circuit ID.
String length	1 to 127
String format	'string' must not start with * (suffix length 1..127)

Notes	The following elements are part of a mandatory choice: length or string .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match-list *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE host match type
Context	configure subscriber-mgmt local-user-db <i>named-item</i> ipoe match-list <i>keyword</i>
Tree	match-list
Description	This command specifies the type of matching done to identify a host. There are different match-types for IPoE hosts.
Options	circuit-id, mac, remote-id, sap-id, service-id, string, system-id, option60, encap-tag-range, dual-stack-remote-id, derived-id, ip, encap-tag-separate-range, duid-en, duid-ll-llt
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rip-policy [[name](#)] *named-item*

Synopsis	Enter the rip-policy list instance
Context	configure subscriber-mgmt rip-policy <i>named-item</i>
Tree	rip-policy
Max. instances	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	RIP policy name
----------	-----------------

Context	configure subscriber-mgmt rip-policy <i>named-item</i>
Tree	rip-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf*

Synopsis	Authentication key
Context	configure subscriber-mgmt rip-policy <i>named-item</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command specifies the authentication key in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 102
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	configure subscriber-mgmt rip-policy <i>named-item</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest, message-digest-20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure subscriber-mgmt rip-policy <i>named-item</i> description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.29 system commands

```

configure
- system
  - alarm-contact-input number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-message description
  - description long-description
  - normal-state keyword
  - trigger-message description
- alarms
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - max-cleared number
- allow-boot-license-violations boolean
- apply-groups reference
- apply-groups-exclude reference
- boot-bad-exec url
- boot-good-exec url
- central-frequency-clock
  - apply-groups reference
  - apply-groups-exclude reference
- gnss
  - admin-state keyword
  - ql-override keyword
- ptp
  - admin-state keyword
  - ql-override keyword
- ql-minimum keyword
- ql-selection boolean
- ref-order
  - first keyword
  - fourth keyword
  - second keyword
  - third keyword
- refl
  - admin-state keyword
  - ql-override keyword
  - source-port port
- ref2
  - admin-state keyword
  - ql-override keyword
  - source-port port
- revert boolean
- wait-to-restore number
- cli-code cli-description
- congestion-management boolean
- contact description
- coordinates description
- cron
  - apply-groups reference
  - apply-groups-exclude reference
  - schedule named-item owner named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - count number
    - day-of-month number

```

configure system cron schedule description

- **description** *description*
- **end-time**
 - **date-and-time** *date-and-time*
 - **day** *keyword*
 - **time** *hours-minutes-twenty-four*
- **hour** *number*
- **interval** *number*
- **minute** *number*
- **month** (*keyword* | *number*)
- **script-policy**
 - **name** *named-item*
 - **owner** *named-item*
 - **type** *keyword*
- **weekday** (*keyword* | *number*)
- **dhcp6**
 - **adv-noaddrs-global** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **dns**
 - **address-pref** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dnssec**
 - **ad-validation** *keyword*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **md-auto-id**
 - **ma-index-range**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
 - **md-index-range**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
- **named-display** *boolean*
- **redundancy**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **mc-lag**
 - **propagate-hold-time** (*number* | *keyword*)
 - **standby-mep** *boolean*
- **slm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timer** *number*
- **grpc**
 - **admin-state** *keyword*
 - **allow-unsecure-connection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **custom-proto** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **python-script** *reference*
 - **urls** *cflash-url*
 - **delay-on-boot** *number*
 - **gnmi**
 - **admin-state** *keyword*

configure system grpc gnmi auto-config-save

```

    - auto-config-save boolean
    - proto-version keyword
  - gnoi
    - cert-mgmt
      - admin-state keyword
    - file
      - admin-state keyword
    - system
      - admin-state keyword
  - listening-port number
  - max-msg-size number
  - tcp-keepalive
    - admin-state keyword
    - idle-time number
    - interval number
    - retries number
  - tls-server-profile reference
  - grpc-tunnel
    - apply-groups reference
    - apply-groups-exclude reference
    - delay-on-boot number
    - destination-group named-item
      - allow-unsecure-connection
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
        - apply-groups reference
        - apply-groups-exclude reference
        - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - originated-qos-marking keyword
        - router-instance string
    - tcp-keepalive
      - admin-state keyword
      - idle-time number
      - interval number
      - retries number
    - tls-client-profile reference
  - tunnel named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - destination-group reference
    - handler named-item
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - port number
      - target-type
        - custom-type string
        - grpc-server
        - ssh-server
    - target-name
      - custom-string named-item-64
      - node-name
      - user-agent
  - icmp-vse boolean
  - ip
    - apply-groups reference
    - apply-groups-exclude reference
    - buffer-unresolved-packets boolean
    - enforce-unique-if-index boolean

```

configure system ip forward-6in4

- **forward-6in4** *boolean*
- **forward-ip-over-gre** *boolean*
- **ipv6-eh** *keyword*
- **lACP**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **system-priority** *number*
- **lldp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **message-fast-tx** *number*
 - **message-fast-tx-init** *number*
 - **notification-interval** *number*
 - **reinit-delay** *number*
 - **tx-credit-max** *number*
 - **tx-hold-multiplier** *number*
 - **tx-interval** *number*
- **load-balancing**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **l4-load-balancing** *boolean*
 - **lsr-load-balancing** *keyword*
 - **service-id-lag-hashing** *boolean*
- **location** *description*
- **login-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **exponential-backoff** *boolean*
 - **ftp**
 - **inbound-max-sessions** *number*
 - **idle-timeout** (*keyword* | *number*)
 - **login-banner** *boolean*
 - **login-scripts**
 - **global-script** *string-not-all-spaces*
 - **per-user-script**
 - **file-name** *filename*
 - **user-directory** *string-not-all-spaces*
- **motd**
 - **text** *string-not-all-spaces*
 - **url** *string-not-all-spaces*
- **pre-login-message**
 - **message** *string-not-all-spaces*
 - **name** *boolean*
- **ssh**
 - **graceful-shutdown** *boolean*
 - **inbound-max-sessions** *number*
 - **max-channels-per-connection** *number*
 - **outbound-max-sessions** *number*
 - **ttl-security** *number*
- **telnet**
 - **graceful-shutdown** *boolean*
 - **inbound-max-sessions** *number*
 - **outbound-max-sessions** *number*
 - **ttl-security** *number*
- **management-interface**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **classic-cli**
 - **allow-immediate** *boolean*
 - **rollback**

configure system management-interface cli classic-cli rollback apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **local-checkpoints** *number*
- **location** *url*
- **remote-checkpoints** *number*
- **rescue**
 - **location** *url*
- **cli-engine** *keyword*
- **md-cli**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-config-save** *boolean*
 - **environment**
 - **command-alias**
 - **alias** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-command** *string*
 - **description** *string-not-all-spaces*
 - **mount-point** (*keyword* | *string*)
 - **python-script** *reference*
 - **command-completion**
 - **enter** *boolean*
 - **space** *boolean*
 - **tab** *boolean*
 - **commit-options**
 - **comment** *boolean*
 - **confirm** *boolean*
 - **console**
 - **length** *number*
 - **width** *number*
 - **history**
 - **recall** *boolean*
 - **size** *number*
 - **info-output**
 - **always-display**
 - **admin-state** *boolean*
 - **match-highlight**
 - **admin-state** *keyword*
 - **style** *keyword*
 - **message-severity-level**
 - **cli** *keyword*
 - **more** *boolean*
 - **progress-indicator**
 - **admin-state** *keyword*
 - **delay** *number*
 - **type** *keyword*
 - **prompt**
 - **context** *boolean*
 - **newline** *boolean*
 - **timestamp** *boolean*
 - **uncommitted-changes-indicator** *boolean*
 - **python**
 - **memory-reservation** *number*
 - **minimum-available-memory** *number*
 - **timeout** *number*
 - **time-display** *keyword*
 - **time-format** *keyword*
- **commit-history** *number*
- **commit-management**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **python-scripts**

configure system management-interface commit-management python-scripts apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **gnmi-trigger** *boolean*
- **md-cli-trigger** *boolean*
- **netconf-trigger** *boolean*
- **post-commit-python-script** *reference*
- **pre-commit-python-script** *reference*
- **configuration-mode** *keyword*
- **configuration-save**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **configuration-backups** *number*
 - **incremental-saves** *boolean*
- **netconf**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-config-save** *boolean*
 - **call-home**
 - **device-labels**
 - **advertise-operating-system** *boolean*
 - **advertise-software-version** *boolean*
 - **advertise-system-name** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **device-label** *string*
 - **netconf-client** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **connection-type** *keyword*
 - **delay-on-boot** *number*
 - **description** *description*
 - **idle-timeout** *number*
 - **remote-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **remote-port** *number*
 - **router-instance** *string*
 - **tls-server-profile** *reference*
 - **transport** *keyword*
- **capabilities**
 - **candidate** *boolean*
- **listen**
 - **admin-state** *keyword*
 - **delay-on-boot** *number*
 - **idle-timeout** *number*
 - **port** *number*
 - **tls-server-profile** *reference*
 - **transport** *keyword*
- **tls-client-identity**
 - **client** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fingerprint** *key-fingerprint-sha256*
 - **map-type** *keyword*
 - **user-name** *reference*
 - **default-client**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **user-name** *reference*
- **operations**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **global-timeouts**
 - **asynchronous-execution** (*number* | *keyword*)
 - **asynchronous-retention** (*number* | *keyword*)

configure system management-interface operations global-timeouts synchronous-execution

```

    - synchronous-execution (number | keyword)
- schema-path url
- snmp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - engine-id engine-id-as-string
    - general-port number
    - max-bulk-duration number
    - packet-size number
    - streaming
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
    - transport keyword
- yang-modules
    - apply-groups reference
    - apply-groups-exclude reference
    - nmda
        - nmda-support boolean
    - nokia-combined-modules boolean
    - nokia-submodules boolean
- name named-item-64
- network-element-discovery
    - apply-groups reference
    - apply-groups-exclude reference
    - generate-traps boolean
    - profile named-item
        - apply-groups reference
        - apply-groups-exclude reference
    - neid string
    - neip
        - apply-groups reference
        - apply-groups-exclude reference
        - auto-generate
            - ipv4
                - vendor-id-value number
            - ipv6
                - vendor-id-value number
        - ipv4 ipv4-unicast-address
        - ipv6 ipv6-address
    - platform-type named-item-255
    - system-mac mac-unicast-address-no-zero
    - vendor-id named-item-255
- ospf-dynamic-hostnames boolean
- persistence
    - ancp
        - apply-groups reference
        - apply-groups-exclude reference
        - description description
        - location keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dhcp-server
        - apply-groups reference
        - apply-groups-exclude reference
        - description description
        - location keyword
    - nat-port-forwarding
        - apply-groups reference
        - apply-groups-exclude reference
        - description description
        - location keyword
- ptp

```

configure system ptp admin-state

- **admin-state** *keyword*
- **alternate-profile** *named-item-64*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **domain** *number*
 - **log-announce-interval** *number*
 - **profile** *keyword*
- **announce-receipt-timeout** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **clock-type** *keyword*
- **domain** *number*
- **initial-time-inaccuracy** *number*
- **local-priority** *number*
- **log-announce-interval** *number*
- **max-steps-removed** *number*
- **network-type** *keyword*
- **port** *reference*
 - **address** *mac-address*
 - **admin-state** *keyword*
 - **alternate-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delay-resp-receipt-timeout** *number*
 - **local-priority** *number*
 - **log-delay-interval** *number*
 - **log-sync-interval** *number*
 - **master-only** *boolean*
 - **monitor-receiver** *boolean*
 - **monitor-sender** *boolean*
 - **not-master** *boolean*
 - **sync-receipt-timeout** *number*
- **priority1** *number*
- **priority2** *number*
- **profile** *keyword*
- **ptsf**
 - **monitor-ptsf-unusable**
 - **admin-state** *keyword*
- **router** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delay-resp-receipt-timeout** *number*
 - **local-priority** *number*
 - **log-sync-interval** *number*
 - **monitor-receiver** *boolean*
 - **not-master** *boolean*
 - **sync-receipt-timeout** *number*
 - **peer-limit** *number*
- **time-inaccuracy** *number*
- **tx-path-trace** *boolean*
- **tx-while-sync-uncertain** *boolean*
- **within-holdover-spec-timer** *number*
- **script-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **script** *named-item* **owner** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure system script-control script apply-groups-exclude

- **apply-groups-exclude** *reference*
 - **description** *description*
 - **location** *string-not-all-spaces*
- **script-policy** *named-item* **owner** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expire-time** (*number* | *keyword*)
 - **lifetime** (*number* | *keyword*)
 - **lock-override** *boolean*
 - **max-completed** *number*
 - **python-lifetime** *number*
 - **python-script**
 - **name** *reference*
 - **results** *string-not-all-spaces*
 - **script**
 - **name** *named-item*
 - **owner** *named-item*
- **security**
 - **aaa**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-session-group** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **combined-max-sessions** *number*
 - **description** *description*
 - **ssh-max-sessions** *number*
 - **telnet-max-sessions** *number*
 - **health-check** (*number* | *keyword*)
 - **local-profiles**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **profile** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-session-group** *reference*
 - **combined-max-sessions** *number*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **match** *display-string*
 - **grpc**
 - **custom-proto** *keyword*
 - **rpc-authorization**
 - **gnmi-capabilities** *keyword*
 - **gnmi-get** *keyword*
 - **gnmi-set** *keyword*
 - **gnmi-subscribe** *keyword*
 - **gnoi-cert-mgmt-cangenerate** *keyword*
 - **gnoi-cert-mgmt-getcert** *keyword*
 - **gnoi-cert-mgmt-install** *keyword*
 - **gnoi-cert-mgmt-revoke** *keyword*
 - **gnoi-cert-mgmt-rotate** *keyword*
 - **gnoi-file-get** *keyword*
 - **gnoi-file-put** *keyword*
 - **gnoi-file-remove** *keyword*
 - **gnoi-file-stat** *keyword*
 - **gnoi-file-transfertoremove** *keyword*
 - **gnoi-system-cancelreboot** *keyword*
 - **gnoi-system-ping** *keyword*

configure system security aaa local-profiles profile grpc rpc-authorization gnoi-system-reboot

- **gnoi-system-reboot** *keyword*
 - **gnoi-system-rebootstatus** *keyword*
 - **gnoi-system-setpackage** *keyword*
 - **gnoi-system-switchcontrolprocessor** *keyword*
 - **gnoi-system-time** *keyword*
 - **gnoi-system-traceroute** *keyword*
- **netconf**
 - **base-op-authorization**
 - **action** *boolean*
 - **cancel-commit** *boolean*
 - **close-session** *boolean*
 - **commit** *boolean*
 - **copy-config** *boolean*
 - **create-subscription** *boolean*
 - **delete-config** *boolean*
 - **discard-changes** *boolean*
 - **edit-config** *boolean*
 - **get** *boolean*
 - **get-config** *boolean*
 - **get-data** *boolean*
 - **get-schema** *boolean*
 - **kill-session** *boolean*
 - **lock** *boolean*
 - **validate** *boolean*
 - **ssh-max-sessions** *number*
 - **telnet-max-sessions** *number*
- **management-interface**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **grpc**
 - **tls-authentication**
 - **admin-state** *keyword*
 - **default-user** *reference*
- **md-cli**
 - **command-accounting-during-load** *boolean*
- **output-authorization**
 - **md-interfaces** *boolean*
 - **telemetry-data** *boolean*
 - **telemetry-default-user** *reference*
- **remote-servers**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ldap**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **public-key-authentication** *boolean*
 - **route-preference** *keyword*
 - **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bind-authentication**
 - **password** *encrypted-leaf*
 - **root-dn** *string-not-all-spaces*
 - **search**
 - **base-dn** *string-not-all-spaces*
 - **server-name** *named-item*
 - **tls-profile** *reference*
 - **server-retry** *number*

configure system security aaa remote-servers ldap server-timeout

```

- server-timeout number
- use-default-template boolean
- radius
  - access-algorithm keyword
  - accounting boolean
  - accounting-port number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authorization boolean
  - interactive-authentication boolean
  - port number
  - route-preference keyword
  - server number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticator keyword
    - secret encrypted-leaf
    - tls-client-profile reference
  - server-retry number
  - server-timeout number
  - use-default-template boolean
- tacplus
  - accounting
    - record-type keyword
  - admin-control
    - tacplus-map-to-priv-lvl number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authorization
    - request-format
      - access-operation-cmd keyword
    - use-priv-lvl boolean
  - ignore-unknown-mandatory-vsas boolean
  - interactive-authentication boolean
  - priv-lvl-map
    - apply-groups reference
    - apply-groups-exclude reference
    - priv-lvl number
      - apply-groups reference
      - apply-groups-exclude reference
      - user-profile-name reference
  - route-preference keyword
  - server number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - port number
    - secret encrypted-leaf
    - tls-connection
      - sni
        - host-name fully-qualified-domain-name
      - tls-client-profile reference
      - tls-port number
  - server-retry-timeout (number | keyword)
  - server-timeout number
  - service-request
    - nokia-grpc-rpc-authorization boolean
    - nokia-netconf-base-op-authorization boolean
    - nokia-user boolean
    - nokia-user-profile boolean
  - single-connection boolean

```

configure system security aaa remote-servers tacplus use-default-template

- **use-default-template** *boolean*
- **vprn-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inband** *reference*
 - **outband** *reference*
 - **vprn** *reference*
- **user-template** *keyword*
 - **access**
 - **console** *boolean*
 - **console-port-cli** *boolean*
 - **ftp** *boolean*
 - **grpc** *boolean*
 - **netconf** *boolean*
 - **scp-sftp** *boolean*
 - **ssh-cli** *boolean*
 - **telnet-cli** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **console**
 - **login-exec** *string-not-all-spaces*
 - **home-directory** *cflash-without-slot-url*
 - **profile** *named-item*
 - **restricted-to-home** *boolean*
 - **save-when-restricted** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cli-script**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization**
 - **cron**
 - **cli-user** *reference*
 - **event-handler**
 - **cli-user** *reference*
- **console-login** *boolean*
- **dist-cpu-protection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **policy** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **local-monitoring-policer** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **exceed-action** *keyword*
 - **log-events** *keyword*
 - **rate**
 - **kpbs**
 - **limit** (*keyword* | *number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword* | *number*)
 - **within** *number*
- **protocol** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dynamic-parameters**
 - **detection-time** *number*
 - **exceed-action**
 - **action** *keyword*

configure system security dist-cpu-protection policy protocol dynamic-parameters exceed-action hold-down

```

    - hold-down (keyword | number)
    - log-events keyword
    - rate
    - kbps
      - limit (keyword | number)
      - mbs number
    - packets
      - initial-delay number
      - limit (keyword | number)
      - within number
    - enforcement
    - dynamic
      - mon-policer-name reference
    - dynamic-local-mon-bypass
    - static
      - policer-name reference
  - static-policer named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - detection-time number
    - exceed-action
      - action keyword
      - hold-down (keyword | number)
    - log-events keyword
    - rate
      - kbps
        - limit (keyword | number)
        - mbs number
      - packets
        - initial-delay number
        - limit (keyword | number)
        - within number
    - type keyword
  - dot1x
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - radius-policy named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - retry number
    - server number
      - accounting-port number
      - address ipv4-unicast-address
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-port number
      - secret encrypted-leaf
      - type keyword
    - source-address ipv4-unicast-address
    - timeout number
  - ftp-server boolean
  - hash-control
    - apply-groups reference
    - apply-groups-exclude reference
  - management-interface
    - classic-cli
      - read-algorithm keyword
      - write-algorithm keyword
    - grpc
      - hash-algorithm keyword
    - md-cli

```

configure system security hash-control management-interface md-cli hash-algorithm

```

    - hash-algorithm keyword
    - netconf
    - hash-algorithm keyword
- keychains
  - keychain named-item
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bidirectional
      - entry number
        - admin-state keyword
        - algorithm keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key encrypted-leaf
        - begin-time date-and-time
        - option keyword
        - tolerance (number | keyword)
    - description description
  - macsec
    - entry number
      - admin-state keyword
      - algorithm keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - begin-time date-and-time
      - cak encrypted-leaf-hex-without-prefix
      - cak-name cak-name
      - tolerance (number | keyword)
  - receive
    - entry number
      - admin-state keyword
      - algorithm keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key encrypted-leaf
      - begin-time date-and-time
      - end-time date-and-time
      - tolerance (number | keyword)
  - send
    - entry number
      - admin-state keyword
      - algorithm keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key encrypted-leaf
      - begin-time date-and-time
  - tcp-option-number
    - receive keyword
    - send keyword
- management
  - allow-ftp boolean
  - allow-grpc boolean
  - allow-netconf boolean
  - allow-ssh boolean
  - allow-telnet boolean
  - allow-telnet6 boolean
  - apply-groups reference
  - apply-groups-exclude reference
- management-access-filter
  - apply-groups reference
  - apply-groups-exclude reference
- ip-filter
  - admin-state keyword

```

configure system security management-access-filter ip-filter apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-action** *keyword*
- **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **log-events** *boolean*
 - **match**
 - **dst-port**
 - **mask** *number*
 - **port** *number*
 - **mgmt-port**
 - **cpm**
 - **lag** *lag-interface*
 - **port-id** *port*
 - **protocol** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv4-prefix* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *ipv4-address*
 - **src-port**
 - **mask** *number*
 - **port** *number*
- **ipv6-filter**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **log-events** *boolean*
 - **match**
 - **dst-port**
 - **mask** *number*
 - **port** *number*
 - **flow-label** *number*
 - **mgmt-port**
 - **cpm**
 - **lag** *lag-interface*
 - **port-id** *port*
 - **next-header** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv6-prefix* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *ipv6-address*
 - **src-port**
 - **mask** *number*
 - **port** *number*
 - **mac-filter**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure system security management-access-filter mac-filter entry description

- **description** *description*
- **log-events** *boolean*
- **match**
 - **cfm-opcode**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **dot1p**
 - **mask** *number*
 - **priority** *number*
 - **dst-mac**
 - **address** *mac-address*
 - **mask** *mac-address*
 - **etype** *etype-value*
 - **frame-type** *keyword*
 - **llc-dsap**
 - **dsap** *number*
 - **mask** *number*
 - **llc-ssap**
 - **mask** *number*
 - **ssap** *number*
 - **service** *service-name*
 - **snap-oui** *keyword*
 - **snap-pid** *number*
 - **src-mac**
 - **address** *mac-address*
 - **mask** *mac-address*
- **pki**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ca-profile** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-crl-update**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **crl-urls**
 - **url-entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **transmission-profile** *reference*
 - **url** *http-url-path-loose*
 - **periodic-update-interval** *number*
 - **pre-update-time** *number*
 - **retry-interval** *number*
 - **schedule-type** *keyword*
 - **cert-file** *pki-file-name*
 - **cmpv2**
 - **accept-unprotected-message**
 - **error-message** *boolean*
 - **pkiconf-message** *boolean*
 - **always-set-sender-for-ir** *boolean*
 - **http**
 - **response-timeout** *number*
 - **version** *keyword*
 - **key-list**
 - **key** *display-string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure system security pki ca-profile cmpv2 key-list key password

```

    - password encrypted-leaf
  - recipient-subject string
  - response-signing-cert pki-file-name
  - response-signing-use-extracert
  - same-recipient-nonce-for-poll-request boolean
  - signing-cert-subject string
  - url
    - service-name service-name
    - transmission-profile reference
    - url-string http-optional-url-loose
  - use-ca-subject
  - crt-file pki-file-name
  - description description
  - oosp
    - responder-url http-optional-url-loose
    - service-name service-name
    - transmission-profile reference
  - revocation-check keyword
  - certificate-auto-update pki-file-name
  - apply-groups reference
  - apply-groups-exclude reference
  - key-file-name pki-file-name
  - profile reference
  - certificate-display-format keyword
  - certificate-expiration-warning
    - hours number
    - repeat-hours number
  - certificate-update-profile named-item
    - after-issue number
    - apply-groups reference
    - apply-groups-exclude reference
    - before-expiry number
  - cmpv2
    - ca-profile reference
  - dsa
    - key-size number
  - ecdsa
    - curve keyword
  - est
    - est-profile reference
  - hash-algorithm keyword
  - retry-interval number
  - rsa
    - key-size number
  - same-as-existing-key
  - common-name-list named-item
    - apply-groups reference
    - apply-groups-exclude reference
    - common-name number
    - apply-groups reference
    - apply-groups-exclude reference
    - cn-type keyword
    - cn-value regular-expression-not-all-spaces
  - crt-expiration-warning
    - hours number
    - repeat-hours number
  - dynamic-ca boolean
  - est-profile named-item
    - apply-groups reference
    - apply-groups-exclude reference
  - check-id-kp-cmcra-only boolean
  - client-tls-profile named-item
  - http-authentication
    - password encrypted-leaf

```

configure system security pki est-profile http-authentication username

```

- username string
- server
- fqdn fully-qualified-domain-name
- ipv4 ipv4-unicast-address
- ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
- path
- cacerts string
- simpleenroll string
- simplereenroll string
- port number
- transmission-profile named-item
- imported-format keyword
- maximum-cert-chain-depth number
- python-script
- apply-groups reference
- apply-groups-exclude reference
- authorization
- cron
- cli-user reference
- event-handler
- cli-user reference
- subscriber-mgmt
- cli-user reference
- snmp
- access named-item context named-item-or-empty security-model keyword security-
level keyword
- apply-groups reference
- apply-groups-exclude reference
- notify named-item
- prefix-match keyword
- read named-item
- write named-item
- apply-groups reference
- apply-groups-exclude reference
- attempts
- apply-groups reference
- apply-groups-exclude reference
- count number
- lockout number
- time number
- community encrypted-leaf
- access-permissions keyword
- apply-groups reference
- apply-groups-exclude reference
- source-access-list reference
- version keyword
- source-access-list string-not-all-spaces
- apply-groups reference
- apply-groups-exclude reference
- source-host named-item
- address (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- usm-community encrypted-leaf
- apply-groups reference
- apply-groups-exclude reference
- group named-item
- source-access-list reference
- view named-item subtree string
- apply-groups reference
- apply-groups-exclude reference
- mask string
- type keyword
- source-address

```

configure system security source-address ipv4

```

- ipv4 keyword
  - address ipv4-address
  - apply-groups reference
  - apply-groups-exclude reference
  - interface-name interface-name
- ipv6 keyword
  - address ipv6-address
  - apply-groups reference
  - apply-groups-exclude reference
- ssh
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-method
    - client
      - public-key-only boolean
    - server
      - public-key-only boolean
  - client-cipher-list-v2
    - apply-groups reference
    - apply-groups-exclude reference
    - cipher number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - client-host-key-list-v2
    - host-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - client-kex-list-v2
    - kex number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - client-known-hosts
    - host-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - description description
      - host-name (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name)
      - key-value string-not-all-spaces
  - client-mac-list-v2
    - mac number
      - apply-groups reference
      - apply-groups-exclude reference
      - name keyword
  - key-re-exchange
    - client
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - mbytes (number | keyword)
      - minutes (number | keyword)
    - server
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - mbytes (number | keyword)
      - minutes (number | keyword)
  - listening-port number
  - permit-empty-passwords boolean
  - preserve-key boolean
  - server-admin-state keyword

```

configure system security ssh server-cipher-list-v2

- **server-cipher-list-v2**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-host-key-list-v2**
 - **host-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-kex-list-v2**
 - **kex** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-mac-list-v2**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **system-passwords**
 - **admin-password** *hashed-leaf*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **tech-support**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ts-location** (*ts-sat-url* | *cflash-url* | *string*)
- **telnet**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **listening-port** *number*
- **telnet-server** *boolean*
- **telnet6-server** *boolean*
- **tls**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert-profile** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **certificate-file** *string-not-all-spaces*
 - **key-file** *string-not-all-spaces*
 - **send-chain**
 - **ca-profile** *reference*
- **client-cipher-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls12-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **tls13-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **client-group-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure system security tls client-group-list tls13-group

- **tls13-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **client-signature-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-signature** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **client-tls-profile** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert-profile** *reference*
 - **cipher-list** *reference*
 - **group-list** *reference*
 - **protocol-version** *keyword*
 - **signature-list** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **ee-revocation**
 - **primary** *keyword*
 - **secondary** *keyword*
 - **trust-anchor-profile** *reference*
- **server-cipher-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls12-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **tls13-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-group-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-signature-list** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-signature** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-tls-profile** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticate-client**
 - **common-name-list** *reference*
 - **trust-anchor-profile** *reference*
 - **cert-profile** *reference*
 - **cipher-list** *reference*
 - **group-list** *reference*
 - **protocol-version** *keyword*
 - **signature-list** *reference*
 - **status-verify**

configure system security tls server-tls-profile status-verify default-result

- **default-result** keyword
- **ee-revocation**
 - **primary** keyword
 - **secondary** keyword
- **tls-re-negotiate-timer** number
- **trust-anchor-profile** named-item
- **apply-groups** reference
- **apply-groups-exclude** reference
- **trust-anchor** reference
- **use-pqc-only** boolean
- **user-params**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **attempts**
 - **count** number
 - **lockout** number
 - **time** number
 - **authentication-order**
 - **exit-on-reject** boolean
 - **order** keyword
 - **local-user**
 - **password**
 - **aging** number
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **complexity-rules**
 - **allow-user-name** boolean
 - **credits**
 - **lowercase** number
 - **numeric** number
 - **special-character** number
 - **uppercase** number
 - **disallow-sequence-keys** number
 - **minimum-classes** number
 - **minimum-length** number
 - **repeated-characters** number
 - **required**
 - **lowercase** number
 - **numeric** number
 - **special-character** number
 - **uppercase** number
 - **hashing** keyword
 - **history-size** number
 - **minimum-age** number
 - **minimum-change** number
 - **user** named-item
 - **access**
 - **console** boolean
 - **console-port-cli** boolean
 - **ftp** boolean
 - **grpc** boolean
 - **netconf** boolean
 - **scp-sftp** boolean
 - **snmp** boolean
 - **ssh-cli** boolean
 - **telnet-cli** boolean
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **cli-engine** keyword
 - **console**
 - **cannot-change-password** boolean
 - **login-exec** string-not-all-spaces
 - **member** reference
 - **new-password-at-login** boolean

configure system security user-params local-user user home-directory

```

- home-directory cflash-without-slot-url
- password hashed-leaf
- public-keys
  - ecdsa
    - ecdsa-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - key-value string-not-all-spaces
  - ed25519
    - ed25519-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - key-value string-not-all-spaces
  - rsa
    - rsa-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - description description
    - key-value string-not-all-spaces
- restricted-to-home boolean
- save-when-restricted boolean
- snmp
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - authentication-key encrypted-leaf-hex-without-prefix
    - authentication-protocol keyword
    - privacy
      - privacy-key encrypted-leaf-hex-without-prefix
      - privacy-protocol keyword
    - group named-item
  - ssh-authentication-method
    - client
      - public-key-only keyword
    - server
      - public-key-only keyword
- vprn-network-exceptions
  - count number
  - window number
- telemetry
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-group named-item
    - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - description description
  - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
    - apply-groups reference
    - apply-groups-exclude reference
    - router-instance string
  - tcp-keepalive
    - admin-state keyword
    - idle-time number
    - interval number
    - retries number
  - tls-client-profile reference
- notification-bundling
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure system telemetry notification-bundling max-msg-count

- **max-msg-count** *number*
- **max-time-granularity** *number*
- **persistent-subscriptions**
 - **delay-on-boot** *number*
 - **subscription** *named-item*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **destination-group** *reference*
 - **encoding** *keyword*
 - **local-source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **mode** *keyword*
 - **originated-qos-marking** *keyword*
 - **sample-interval** *number*
 - **sensor-group** *reference*
- **sensor-groups**
 - **sensor-group** *named-item*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **path** *string*
- **thresholds**
 - **cflash-cap-alarm-percent** *thresholds-cflash-url*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
 - **cflash-cap-warn-percent** *thresholds-cflash-url*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
 - **kb-memory-use-alarm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
 - **kb-memory-use-warn**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
 - **rmon**
 - **alarm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-event** *number*
 - **falling-threshold** *number*
 - **interval** *number*
 - **owner** *string-not-all-spaces*
 - **rising-event** *number*

configure system thresholds rmon alarm rising-threshold

- **rising-threshold** *number*
 - **sample-type** *keyword*
 - **startup-alarm** *keyword*
 - **variable-oid** *string*
- **event** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *description*
 - **event-type** *keyword*
 - **owner** *string-not-all-spaces*
- **hc-alarm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-event** *number*
 - **falling-threshold** *number*
 - **interval** *number*
 - **owner** *string-not-all-spaces*
 - **rising-event** *number*
 - **rising-threshold** *number*
 - **sample-type** *keyword*
 - **startup-alarm** *keyword*
 - **variable-oid** *string*
- **time**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **daylight-saving-time-zone**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **non-standard**
 - **end**
 - **day** *keyword*
 - **hours-minutes** *hours-minutes-twenty-four*
 - **month** *keyword*
 - **week** *keyword*
 - **name** *string*
 - **offset** *number*
 - **start**
 - **day** *keyword*
 - **hours-minutes** *hours-minutes-twenty-four*
 - **month** *keyword*
 - **week** *keyword*
 - **standard**
 - **name** *keyword*
- **ntp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-check** *boolean*
 - **authentication-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key** *encrypted-leaf*
 - **type** *keyword*
 - **authentication-keychain** *reference*
 - **broadcast** *reference* **interface-name** *interface-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-keychain** *reference*
 - **key-id** *reference*
 - **ttl** *number*
 - **version** *number*
 - **broadcast-client** *string* **interface-name** *interface-name*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure system time ntp broadcast-client authenticate

```

- authenticate boolean
- max-poll number
- min-poll number
- multicast
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-keychain reference
  - key-id reference
  - version number
- multicast-client
  - apply-groups reference
  - apply-groups-exclude reference
  - authenticate boolean
- ntp-server
  - authenticate boolean
- peer (ipv4-address-no-zone | ipv6-address-no-zone) router-instance string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-keychain reference
  - key-id reference
  - prefer boolean
  - version number
- server (ipv4-address-no-zone | ipv6-address-no-zone | keyword) router-
instance string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-keychain reference
  - key-id reference
  - prefer boolean
  - version number
- prefer-local-time boolean
- sntp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - server ipv4-address
    - apply-groups reference
    - apply-groups-exclude reference
    - interval number
    - prefer boolean
    - version number
  - sntp-state keyword
- zone
  - non-standard
    - name string
    - offset hours-minutes-with-range
  - standard
    - name keyword
- transmission-profile named-item
  - apply-groups reference
  - apply-groups-exclude reference
  - http-version keyword
  - ipv4-source-address ipv4-unicast-address
  - ipv6-source-address ipv6-address
  - redirection number
  - retry number
  - router-instance router-instance-base-management-vprn-loose
  - timeout number
- usb keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

4.29.1 system command descriptions

system

Synopsis	Enter the system context
Context	configure system
Tree	system
Description	Commands in this context enable the configuration of general system level functions and router management protocols.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm-contact-input [[input-pin-number](#)] *number*

Synopsis	Enter the alarm-contact-input list instance
Context	configure system alarm-contact-input <i>number</i>
Tree	alarm-contact-input
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[\[input-pin-number\]](#) *number*

Synopsis	Alarm contact input number
Context	configure system alarm-contact-input <i>number</i>
Tree	alarm-contact-input
Range	1 to 4
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the alarm contact input
Context	configure system alarm-contact-input <i>number</i> admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

clear-message *description*

Synopsis	Text message sent in the log event when an alarm clears
Context	configure system alarm-contact-input <i>number</i> clear-message <i>description</i>
Tree	clear-message
Description	<p>This command configures a text message to be included in the log event that is sent when the system clears an alarm.</p> <p>The system generates the default "Alarm Input Cleared" message if no message is configured. The clear-message string is included in the log event when the pin changes to the normal state.</p>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Default	Alarm Input Cleared
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

description *long-description*

Synopsis	Text description
Context	configure system alarm-contact-input <i>number</i> description <i>long-description</i>
Tree	description
String length	1 to 160
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

normal-state *keyword*

Synopsis	Normal state associated with the alarm contact input
Context	configure system alarm-contact-input <i>number</i> normal-state <i>keyword</i>
Tree	normal-state

Options	open, closed
Default	open
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

trigger-message *description*

Synopsis	Text message sent in the log event when input changes
Context	configure system alarm-contact-input <i>number</i> trigger-message <i>description</i>
Tree	trigger-message
Description	<p>This command configures a text message to be included in the log event that is sent when the system generates an alarm.</p> <p>The system generates the default message "Alarm Input Triggered" if no message is configured. This command's message string is included in the log event when the pin changes from the normal state.</p>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Default	Alarm Input Triggered
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

alarms

Synopsis	Enter the alarms context
Context	configure system alarms
Tree	alarms
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the system alarm
Context	configure system alarms admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-cleared *number*

Synopsis	Maximum number of cleared alarms
Context	configure system alarms max-cleared <i>number</i>
Tree	max-cleared
Range	0 to 500
Default	500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-boot-license-violations *boolean*

Synopsis	Allow boot license violations in boot-up configuration
Context	configure system allow-boot-license-violations <i>boolean</i>
Tree	allow-boot-license-violations
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-bad-exec *url*

Synopsis	CLI script file to execute following a failed boot
Context	configure system boot-bad-exec <i>url</i>
Tree	boot-bad-exec
Description	<p>This command configures the name of the CLI script file to be run following the failure of a boot configuration.</p> <p>Note: This command has no effect in model-driven mode.</p>
String length	1 to 180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

boot-good-exec *url*

Synopsis	CLI script file to execute following successful boot
Context	configure system boot-good-exec <i>url</i>
Tree	boot-good-exec
Description	This command configures a URL for a CLI script to exec following the success of a boot configuration. Related Commands exec - This command executes the contents of a text file as if they were CLI commands entered at the console.
String length	1 to 180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

central-frequency-clock

Synopsis	Enter the central-frequency-clock context
Context	configure system central-frequency-clock
Tree	central-frequency-clock
Description	Commands in this context configure synchronous interface timing.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

gnss

Synopsis	Enter the gnss context
Context	configure system central-frequency-clock gnss
Tree	gnss
Description	Commands in this context configure system timing using GNSS on platforms that support one or more embedded GNSS receivers.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the GNSS timing reference
----------	---

Context	configure system central-frequency-clock gnss admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ql-override *keyword*

Synopsis	Quality level override for a timing reference
Context	configure system central-frequency-clock gnss ql-override <i>keyword</i>
Tree	ql-override
Options	unused – Not used prs – SONET Primary Reference Source traceable stu – SONET Synchronous Traceability Unknown st2 – SONET Stratum 2 traceable tnc – SONET Transit Node Clock traceable st3e – SONET Stratum 3E traceable st3 – SONET Stratum 3 traceable eprtc – Enhanced Primary Reference Time Clock prtc – Primary Reference Time Clock eprc – Enhanced Primary Reference Clock eeec – Enhanced Ethernet Equipment Clock
Default	unused
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ptp

Synopsis	Enter the ptp context
Context	configure system central-frequency-clock ptp
Tree	ptp
Description	Commands in this context configure system timing using IEEE 1588-2008, PTP.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state keyword

Synopsis	Administrative state of the PTP timing reference
Context	configure system central-frequency-clock ptp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ql-override keyword

Synopsis	Quality level override of a timing reference
Context	configure system central-frequency-clock ptp ql-override <i>keyword</i>
Tree	ql-override
Options	unused – Not used prs – SONET Primary Reference Source traceable stu – SONET Synchronous Traceability Unknown st2 – SONET Stratum 2 traceable tnc – SONET Transit Node Clock traceable st3e – SONET Stratum 3E traceable st3 – SONET Stratum 3 traceable prc – SDH Primary Reference Clock traceable ssua – SDH primary level Synchronization Supply Unit traceable ssub – SDH second Level Synchronization Supply Unit traceable sec – SDH Synchronous Equipment Clock traceable eprtc – Enhanced Primary Reference Time Clock prtc – Primary Reference Time Clock eprc – Enhanced Primary Reference Clock eeec – Enhanced Ethernet Equipment Clock
Default	unused
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ql-minimum keyword

Synopsis	Minimum signal QL for system timing module
Context	configure system central-frequency-clock ql-minimum <i>keyword</i>
Tree	ql-minimum

Description	This command configures the minimum acceptable QL value for a signal to be considered for selection by the system timing module.
Options	unused – Not used prs – SONET Primary Reference Source traceable stu – SONET Synchronous Traceability Unknown st2 – SONET Stratum 2 traceable tnc – SONET Transit Node Clock traceable st3e – SONET Stratum 3E traceable st3 – SONET Stratum 3 traceable prc – SDH Primary Reference Clock traceable ssua – SDH primary level Synchronization Supply Unit traceable ssub – SDH second Level Synchronization Supply Unit traceable sec – SDH Synchronous Equipment Clock traceable eec1 – SDH Ethernet Equipment Clock eec2 – SONET Ethernet Equipment Clock eprtc – Enhanced Primary Reference Time Clock prtc – Primary Reference Time Clock eprc – Enhanced Primary Reference Clock eeec – Enhanced Ethernet Equipment Clock
Default	unused
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ql-selection *boolean*

Synopsis	Consider QL in system and BITS output timing
Context	configure system central-frequency-clock ql-selection <i>boolean</i>
Tree	ql-selection
Description	When configured to true , the router considers the QL when selecting the system timing reference and BITS output timing reference. The QL is conveyed via the SSM or forced using the ql-override command.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ref-order

Synopsis	Enter the ref-order context
Context	configure system central-frequency-clock ref-order
Tree	ref-order

Description	Commands in this context specify the priority order of the synchronous equipment timing subsystem. If a reference source is disabled, this command defines the next reference source for the clock. If all reference sources are disabled, clocking is derived from a local oscillator. If a timing reference is linked to a source port that is operationally down, the port is no longer a qualified, valid reference.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

first keyword

Synopsis	First preferred timing reference source
Context	configure system central-frequency-clock ref-order first <i>keyword</i>
Tree	first
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

fourth keyword

Synopsis	Fourth preferred timing reference source
Context	configure system central-frequency-clock ref-order fourth <i>keyword</i>
Tree	fourth
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

second keyword

Synopsis	Second preferred timing reference source
Context	configure system central-frequency-clock ref-order second <i>keyword</i>
Tree	second
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

third keyword

Synopsis	Third preferred timing reference source
Context	configure system central-frequency-clock ref-order third <i>keyword</i>
Tree	third
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ref1

Synopsis	Enter the ref1 context
Context	configure system central-frequency-clock ref1
Tree	ref1
Description	Commands in this context configure the first timing reference. [
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state keyword

Synopsis	Administrative state of the first timing reference
Context	configure system central-frequency-clock ref1 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ql-override keyword

Synopsis	Quality level override of a timing reference
Context	configure system central-frequency-clock ref1 ql-override <i>keyword</i>
Tree	ql-override

Description	This command configures the QL value used for the reference for SETS input selection. This value overrides any value received by the referenced SSM process.
Options	unused – Not used prs – SONET Primary Reference Source traceable stu – SONET Synchronous Traceability Unknown st2 – SONET Stratum 2 traceable tnc – SONET Transit Node Clock traceable st3e – SONET Stratum 3E traceable st3 – SONET Stratum 3 traceable prc – SDH Primary Reference Clock traceable ssua – SDH primary level Synchronization Supply Unit traceable ssub – SDH second Level Synchronization Supply Unit traceable sec – SDH Synchronous Equipment Clock traceable eec1 – SDH Ethernet Equipment Clock eec2 – SONET Ethernet Equipment Clock eprtc – Enhanced Primary Reference Time Clock prtc – Primary Reference Time Clock eprc – Enhanced Primary Reference Clock eeec – Enhanced Ethernet Equipment Clock
Default	unused
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

source-port *port*

Synopsis	Source port for the first timing reference
Context	configure system central-frequency-clock ref1 source-port <i>port</i>
Tree	source-port
Description	<p>This command configures the source port for timing reference ref1. If the port is unavailable or the link is down, the reference sources are reevaluated according to the reference order configured in the ref-order command.</p> <p>There are platform-based restrictions on the location for the source port locations for ref1. See the <i>7705 SAR Gen 2 Basic System Configuration Guide</i> for more information.</p>
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ref2

Synopsis	Enter the ref2 context
Context	configure system central-frequency-clock ref2
Tree	ref2

Description	Commands in this context configure the second timing reference.
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the second timing reference
Context	configure system central-frequency-clock ref2 admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ql-override *keyword*

Synopsis	Quality level override of a timing reference
Context	configure system central-frequency-clock ref2 ql-override <i>keyword</i>
Tree	ql-override
Description	This command configures the QL value used for the reference for SETS input selection. This value overrides any value received by the referenced SSM process.
Options	unused – Not used prs – SONET Primary Reference Source traceable stu – SONET Synchronous Traceability Unknown st2 – SONET Stratum 2 traceable tnc – SONET Transit Node Clock traceable st3e – SONET Stratum 3E traceable st3 – SONET Stratum 3 traceable prc – SDH Primary Reference Clock traceable ssua – SDH primary level Synchronization Supply Unit traceable ssub – SDH second Level Synchronization Supply Unit traceable sec – SDH Synchronous Equipment Clock traceable eec1 – SDH Ethernet Equipment Clock eec2 – SONET Ethernet Equipment Clock eprtc – Enhanced Primary Reference Time Clock prtc – Primary Reference Time Clock eprc – Enhanced Primary Reference Clock eec – Enhanced Ethernet Equipment Clock
Default	unused
Introduced	25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

source-port *port*

Synopsis Source port for the second timing reference

Context **configure** **system** **central-frequency-clock** **ref2** **source-port** *port*

Tree **source-port**

Description This command configures the source port for timing reference **ref2**. If the port is unavailable or the link is down, the reference sources are reevaluated according to the reference order configured in the **ref-order** command.

There are platform-based restrictions on the location for the source port locations for **ref2**. See the *7705 SAR Gen 2 Basic System Configuration Guide* for more information.

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

revert *boolean*

Synopsis Revert to higher-priority reference source

Context **configure** **system** **central-frequency-clock** **revert** *boolean*

Tree **revert**

Description When configured to **true**, the router operates in revertive mode, allowing the clock to revert to a higher priority reference if the current reference goes offline or becomes unstable. When the failed reference becomes operational, it is eligible for selection.

When configured to **false**, the router does not allow a failed clocked source to be selected again.

Default false

Introduced 25.3.R2

Platforms 7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

wait-to-restore *number*

Synopsis Time to revalidate a previously failed input reference

Context **configure** **system** **central-frequency-clock** **wait-to-restore** *number*

Tree **wait-to-restore**

Description This command configures the time for the Wait to Restore timer. A previously failed input reference must be valid for the specified time before it can be used for either the BITS output or the central clock input reference.

Range	1 to 12
Units	minutes
Introduced	25.3.R2
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

cli-code *cli-description*

Synopsis	CLLI code value for the system
Context	configure system cli-code <i>cli-description</i>
Tree	cli-code
String length	11
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

congestion-management *boolean*

Synopsis	Enable Virtual Service Router congestion management
Context	configure system congestion-management <i>boolean</i>
Tree	congestion-management
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

contact *description*

Synopsis	Contact information for the managed node
Context	configure system contact <i>description</i>
Tree	contact
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

coordinates *description*

Synopsis	GPS coordinates for the system location
Context	configure system coordinates <i>description</i>
Tree	coordinates
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cron

Synopsis	Enter the cron context
Context	configure system cron
Tree	cron
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

schedule [[schedule-name](#)] *named-item* [owner](#) *named-item*

Synopsis	Enter the schedule list instance
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i>
Tree	schedule
Max. instances	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[schedule-name] *named-item*

Synopsis	Schedule name
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i>
Tree	schedule
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *named-item*

Synopsis	Schedule owner
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i>
Tree	schedule
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	TIMOS CLI
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the CRON schedule
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count *number*

Synopsis	Number of times to repeat a periodic schedule run
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> count <i>number</i>
Tree	count
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

day-of-month *number*

Synopsis	Days in a month when a schedule runs
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> day-of-month <i>number</i>
Tree	day-of-month
Range	-31 to -1 1 to 31
Max. instances	62
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-time

Synopsis	Enter the end-time context
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> end-time
Tree	end-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

date-and-time *date-and-time*

Synopsis	Date and time to stop triggering the schedule
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> end-time date-and-time <i>date-and-time</i>
Tree	date-and-time
Notes	The following elements are part of a choice: date-and-time or (day and time).

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

day *keyword*

Synopsis Day to stop triggering the schedule
Context **configure** [system cron schedule](#) *named-item* [owner](#) *named-item* [end-time](#) [day](#) *keyword*
Tree [day](#)
Options sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes The following elements are part of a choice: **date-and-time** or (**day** and **time**).
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

time *hours-minutes-twenty-four*

Synopsis Time to stop triggering the schedule
Context **configure** [system cron schedule](#) *named-item* [owner](#) *named-item* [end-time](#) [time](#) *hours-minutes-twenty-four*
Tree [time](#)
String length 5
String format 'hours-minutes-twenty-four' must be hh:mm, hours 00-23, minutes 00-59 (e.g. 14:30)
Notes The following elements are part of a choice: **date-and-time** or (**day** and **time**).
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

hour *number*

Synopsis Hours within a day when the schedule runs
Context **configure** [system cron schedule](#) *named-item* [owner](#) *named-item* [hour](#) *number*
Tree [hour](#)
Range 0 to 23
Max. instances 24
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

interval *number*

Synopsis	Time between each periodic schedule run
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> interval <i>number</i>
Tree	interval
Range	30 to 42949672
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minute *number*

Synopsis	Minutes in an hour when the schedule runs
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> minute <i>number</i>
Tree	minute
Range	0 to 59
Max. instances	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

month (*keyword* | *number*)

Synopsis	Months when the schedule runs
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> month (<i>keyword</i> <i>number</i>)
Tree	month
Range	1 to 12
Options	january, february, march, april, may, june, july, august, september, october, november, december
Max. instances	12
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script-policy

Synopsis	Enter the script-policy context
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> script-policy
Tree	script-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *named-item*

Synopsis	CLI script policy name
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> script-policy name <i>named-item</i>
Tree	name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *named-item*

Synopsis	Script policy owner
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> script-policy owner <i>named-item</i>
Tree	owner
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Schedule type
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> type <i>keyword</i>
Tree	type
Options	periodic, calendar, oneshot

Default	periodic
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weekday (*keyword | number*)

Synopsis	Weekdays when the schedule runs
Context	configure system cron schedule <i>named-item</i> owner <i>named-item</i> weekday (<i>keyword number</i>)
Tree	weekday
Range	1 to 7
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp6

Synopsis	Enter the dhcp6 context
Context	configure system dhcp6
Tree	dhcp6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

adv-noaddrs-global *keyword*

Synopsis	Applications to send NoAddrsAvail in Advertise messages
Context	configure system dhcp6 adv-noaddrs-global <i>keyword</i>
Tree	adv-noaddrs-global
Options	esm-relay, server
Max. instances	2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dns

Synopsis	Enter the dns context
Context	configure system dns
Tree	dns
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address-pref *keyword*

Synopsis	Preference in DNS address resolving order
Context	configure system dns address-pref <i>keyword</i>
Tree	address-pref
Options	ipv4-only, ipv6-first
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dnssec

Synopsis	Enter the dnssec context
Context	configure system dns dnssec
Tree	dnssec
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ad-validation *keyword*

Synopsis	Validation of AD-bit presence in DNS server responses
Context	configure system dns dnssec ad-validation <i>keyword</i>
Tree	ad-validation
Options	fall-through – Allow non-DNSSEC responses to fall-through to permit resolution in case of validation failure drop – Drop non-DNSSEC responses in case of validation failure
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure system eth-cfm
Tree	eth-cfm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure system eth-cfm md-auto-id
Tree	md-auto-id
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ma-index-range

Synopsis	Enable the ma-index-range context
Context	configure system eth-cfm md-auto-id ma-index-range
Tree	ma-index-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	configure system eth-cfm md-auto-id ma-index-range end <i>number</i>
Tree	end
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

start *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	configure system eth-cfm md-auto-id ma-index-range start <i>number</i>
Tree	start
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-index-range

Synopsis	Enable the md-index-range context
Context	configure system eth-cfm md-auto-id md-index-range
Tree	md-index-range
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	configure system eth-cfm md-auto-id md-index-range end <i>number</i>
Tree	end
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

start *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	configure system eth-cfm md-auto-id md-index-range start <i>number</i>
Tree	start
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

named-display *boolean*

Synopsis	Enable administrative name display in CLI show outputs
Context	configure system eth-cfm named-display <i>boolean</i>
Tree	named-display
Description	<p>When configured to true, the system displays the administrative names for domains, associations, and bridge-identifiers in show eth-cfm command outputs in addition to the numerical maintenance domain (MD) index, maintenance association (MA) index, and bridge ID values. The administrative names are displayed underneath the numerical values, each on a separate row.</p> <p>When configured to false, the system only displays the numerical MD index, MA index, and bridge ID values in show eth-cfm command outputs.</p>
Default	false
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

redundancy

Synopsis	Enter the redundancy context
Context	configure system eth-cfm redundancy
Tree	redundancy

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mc-lag

Synopsis	Enter the mc-lag context
Context	configure system eth-cfm redundancy mc-lag
Tree	mc-lag
Description	Commands in this context configure the MC-LAG specific ETH-CFM redundancy options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

propagate-hold-time (*number* | *keyword*)

Synopsis	Delay timer value for the fault propagation
Context	configure system eth-cfm redundancy mc-lag propagate-hold-time (<i>number</i> <i>keyword</i>)
Tree	propagate-hold-time
Description	This command configures the delay for fault propagation because of port or MC-LAG state changes. This provides the amount of time for system stabilization during a port state change that may be protected by MC-LAG.
Range	1 to 60
Units	seconds
Options	none
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standby-mep *boolean*

Synopsis	Allow standby MC-LAG MEPs to act administratively down
Context	configure system eth-cfm redundancy mc-lag standby-mep <i>boolean</i>
Tree	standby-mep
Description	This command, which is system wide, configures MEPs to track the state of MC-LAG. This allows MEPs on the standby MC-LAG to act administratively down.
Default	false

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

slm

Synopsis	Enter the slm context
Context	configure system eth-cfm slm
Tree	slm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inactivity-timer *number*

Synopsis	SLR inactivity timer to maintain the stale test data
Context	configure system eth-cfm slm inactivity-timer <i>number</i>
Tree	inactivity-timer
Description	This command configures the time that the responder keeps a test active. If the time between packets exceeds this value within a test, the responder marks the previous test as complete. It treats any new packets from a peer with the same test ID, source MAC, and MEP-ID as a new test responding with the sequence number one.
Range	10 to 100
Units	seconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc

Synopsis	Enter the grpc context
Context	configure system grpc
Tree	grpc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the gRPC server
Context	configure system grpc admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	configure system grpc allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, the system allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-server-profile .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

custom-proto [\[name\]](#) *named-item*

Synopsis	Enter the custom-proto list instance
Context	configure system grpc custom-proto <i>named-item</i>
Tree	custom-proto
Max. instances	1
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Custom proto name
Context	configure system grpc custom-proto <i>named-item</i>

Tree	custom-proto
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of customized proto
Context	configure system grpc custom-proto <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system grpc custom-proto <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

python-script *reference*

Synopsis	Python script name handling RPC from proto file
Context	configure system grpc custom-proto <i>named-item</i> python-script <i>reference</i>
Tree	python-script
Reference	configure python python-script <i>named-item</i>
Introduced	26.7.R1

Platforms 7705 SAR Gen 2

urls *cflash-url*

Synopsis Locations of compiled proto file

Context **configure** [system](#) [grpc](#) [custom-proto](#) *named-item* [urls](#) *cflash-url*

Tree [urls](#)

String length 1 to 200

String format 'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)
'cflash-url' must have each path segment at most 99 characters

Max. instances 3

Notes This element is ordered by the user.

Introduced 26.7.R1

Platforms 7705 SAR Gen 2

delay-on-boot *number*

Synopsis Delay for gRPC connections after system boot

Context **configure** [system](#) [grpc](#) [delay-on-boot](#) *number*

Tree [delay-on-boot](#)

Description This command configures the delay timer for gRPC connections. When the timer expires, gRPC becomes operational and connections are accepted. This delay prevents automation from managing the system while it is still converging.

When no delay is configured, connections are accepted after the system boots and gRPC becomes operational.

Range 1 to 3600

Units seconds

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gnmi

Synopsis Enter the **gnmi** context

Context **configure** [system](#) [grpc](#) [gnmi](#)

Tree [gnmi](#)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the gNMI service
Context	configure system grpc gnmi admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	configure system grpc gnmi auto-config-save <i>boolean</i>
Tree	auto-config-save
Description	When configured to true , the system automatically writes the running configuration to the saved configuration file as part of a successful commit operation.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

proto-version *keyword*

Synopsis	gnmi.proto version
Context	configure system grpc gnmi proto-version <i>keyword</i>
Tree	proto-version
Description	This command sets the gnmi.proto version that the gRPC server should use for all gNMI RPCs. Only use options other than latest for backward compatibility with legacy collectors.
Options	latest – Latest version 0.8.0 v070 – Version 0.7.0
Default	latest
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gnoi

Synopsis Enter the **gnoi** context
Context **configure** [system grpc gnoi](#)
Tree [gnoi](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

cert-mgmt

Synopsis Enter the **cert-mgmt** context
Context **configure** [system grpc gnoi cert-mgmt](#)
Tree [cert-mgmt](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of gNOI CertificateManagement
Context **configure** [system grpc gnoi cert-mgmt admin-state](#) *keyword*
Tree [admin-state](#)
Options enable, disable
Default disable
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

file

Synopsis Enter the **file** context
Context **configure** [system grpc gnoi file](#)
Tree [file](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the gNOI File service
Context	configure system grpc gnoi file admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system

Synopsis	Enter the system context
Context	configure system grpc gnoi system
Tree	system
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the gNOI System service
Context	configure system grpc gnoi system admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

listening-port *number*

Synopsis	Listening port for the gRPC server
Context	configure system grpc listening-port <i>number</i>
Tree	listening-port
Range	1024 to 49151 57400
Default	57400

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-msg-size *number*

Synopsis	Maximum size of received message
Context	configure system grpc max-msg-size <i>number</i>
Tree	max-msg-size
Range	1 to 1024
Units	megabytes
Default	512
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-keepalive

Synopsis	Enter the tcp-keepalive context
Context	configure system grpc tcp-keepalive
Tree	tcp-keepalive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	configure system grpc tcp-keepalive admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
----------	--

Context	configure system grpc tcp-keepalive idle-time <i>number</i>
Tree	idle-time
Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range	1 to 100000
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Time between TCP keep-alive probes
Context	configure system grpc tcp-keepalive interval <i>number</i>
Tree	interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	configure system grpc tcp-keepalive retries <i>number</i>
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-server-profile *reference*

Synopsis	Preferred TLS server profile
Context	configure system grpc tls-server-profile <i>reference</i>
Tree	tls-server-profile
Reference	configure system security tls server-tls-profile <i>named-item</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-server-profile .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc-tunnel

Synopsis	Enter the grpc-tunnel context
Context	configure system grpc-tunnel
Tree	grpc-tunnel
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-on-boot *number*

Synopsis	Delay for gRPC tunnels after system boot
Context	configure system grpc-tunnel delay-on-boot <i>number</i>
Tree	delay-on-boot
Description	<p>This command configures the delay timer for gRPC tunnels. When the timer expires, gRPC tunnels become operational and connections are accepted. This delay prevents the system from trying to initiate gRPC tunnels while it is still converging.</p> <p>When no delay is configured, gRPC tunnels are initiated after the system boots and gRPC becomes operational.</p>
Range	1 to 3600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-group [[name](#)] *named-item*

Synopsis	Enter the destination-group list instance
Context	configure system grpc-tunnel destination-group <i>named-item</i>
Tree	destination-group
Description	Commands in this context configure parameters for destination groups.
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Destination group name
Context	configure system grpc-tunnel destination-group <i>named-item</i>
Tree	destination-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-unsecure-connection

Synopsis	Allow unsecured operation of gRPC connections
Context	configure system grpc-tunnel destination-group <i>named-item</i> allow-unsecure-connection
Tree	allow-unsecure-connection
Description	This command allows a gRPC tunnel to run without a secured transport protocol. Data is transferred in unencrypted form.
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system grpc-tunnel destination-group <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) **port** *number*

Synopsis	Enter the destination list instance
Context	configure system grpc-tunnel destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	Address of the destination within the destination group
Context	configure system grpc-tunnel destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
String length	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port number

Synopsis	TCP port number for the destination
Context	configure system grpc-tunnel destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number
Tree	destination
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address of packets sent from the source
Context	configure system grpc-tunnel destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number local-source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-source-address
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

originated-qos-marking *keyword*

Synopsis	QoS marking used for gRPC tunnel packets
Context	configure system grpc-tunnel destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number originated-qos-marking <i>keyword</i>
Tree	originated-qos-marking
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance for the destination group
Context	configure system grpc-tunnel destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i> router-instance <i>string</i>
Tree	router-instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-keepalive

Synopsis	Enter the tcp-keepalive context
Context	configure system grpc-tunnel destination-group <i>named-item</i> tcp-keepalive
Tree	tcp-keepalive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	configure system grpc-tunnel destination-group <i>named-item</i> tcp-keepalive admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-time *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	configure system grpc-tunnel destination-group <i>named-item</i> tcp-keepalive idle-time <i>number</i>
Tree	idle-time

Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range	1 to 100000
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Time between TCP keep-alive probes
Context	configure system grpc-tunnel destination-group <i>named-item</i> tcp-keepalive interval <i>number</i>
Tree	interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	configure system grpc-tunnel destination-group <i>named-item</i> tcp-keepalive retries <i>number</i>
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS client profile assigned to the destination group
Context	configure system grpc-tunnel destination-group <i>named-item</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>named-item</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tunnel [[name](#)] *named-item*

Synopsis	Enter the tunnel list instance
Context	configure system grpc-tunnel tunnel <i>named-item</i>
Tree	tunnel
Description	Commands in this context configure gRPC-tunnel-related parameters.
Max. instances	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Tunnel name
Context	configure system grpc-tunnel tunnel <i>named-item</i>
Tree	tunnel
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the tunnel
Context	configure system grpc-tunnel tunnel <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system grpc-tunnel tunnel <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-group *reference*

Synopsis	Destination group used in the tunnel
Context	configure system grpc-tunnel tunnel <i>named-item</i> destination-group <i>reference</i>
Tree	destination-group
Reference	configure system grpc-tunnel destination-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

handler [[name](#)] *named-item*

Synopsis	Enter the handler list instance
Context	configure system grpc-tunnel tunnel <i>named-item</i> handler <i>named-item</i>
Tree	handler

Description	Commands in this context configure handler parameters for this instance. Multiple handlers can be created for any tunnel.
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Handler name
Context	configure system grpc-tunnel tunnel <i>named-item</i> handler <i>named-item</i>
Tree	handler
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the handler
Context	configure system grpc-tunnel tunnel <i>named-item</i> handler <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	TCP port number the handler listens to internally
Context	configure system grpc-tunnel tunnel <i>named-item</i> handler <i>named-item</i> port <i>number</i>
Tree	port
Range	1 to 65535
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

target-type

Synopsis Enter the **target-type** context

Context **configure** **system** **grpc-tunnel** **tunnel** *named-item* **handler** *named-item* **target-type**

Tree **target-type**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

custom-type *string*

Synopsis Custom string for target type

Context **configure** **system** **grpc-tunnel** **tunnel** *named-item* **handler** *named-item* **target-type** **custom-type** *string*

Tree **custom-type**

Description This command configures a custom string for the target type. This string can correspond to specific values used by the gRPC tunnel protocol, such as GNMI_GNOI or SSH. If a custom string is defined, the gRPC tunnel client must specify the string to request a session for that handler. The string must be unique within a tunnel.

String length 1 to 64

String format 'custom-type' must contain only uppercase letters, digits or underscores

Notes The following elements are part of a choice: **custom-type**, **grpc-server**, or **ssh-server**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

grpc-server

Synopsis Target type set to GNMI_GNOI

Context **configure** **system** **grpc-tunnel** **tunnel** *named-item* **handler** *named-item* **target-type** **grpc-server**

Tree **grpc-server**

Description When configured, this command assigns the gRPC server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of GNMI_GNOI.

Notes The following elements are part of a choice: **custom-type**, **grpc-server**, or **ssh-server**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ssh-server

Synopsis Target type is SSH

Context **configure** [system](#) [grpc-tunnel tunnel](#) *named-item* [handler](#) *named-item* [target-type ssh-server](#)

Tree [ssh-server](#)

Description When configured, this command assigns the SSH server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of SSH.

Notes The following elements are part of a choice: **custom-type**, **grpc-server**, or **ssh-server**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

target-name

Synopsis Enter the **target-name** context

Context **configure** [system](#) [grpc-tunnel tunnel](#) *named-item* [target-name](#)

Tree [target-name](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

custom-string *named-item-64*

Synopsis Custom target name

Context **configure** [system](#) [grpc-tunnel tunnel](#) *named-item* [target-name](#) [custom-string](#) *named-item-64*

Tree [custom-string](#)

String length 1 to 64

String format 'string-not-all-spaces' must contain at least one non-space character

Notes The following elements are part of a choice: **custom-string**, **node-name**, or **user-agent**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

node-name

Synopsis	Set the node name as target name
Context	configure system grpc-tunnel tunnel <i>named-item</i> target-name node-name
Tree	node-name
Description	When configured, this command uses the node name as the target name. The node name is configured by the configure system name command.
Notes	The following elements are part of a choice: custom-string , node-name , or user-agent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-agent

Synopsis	Set the user agent as the target name
Context	configure system grpc-tunnel tunnel <i>named-item</i> target-name user-agent
Tree	user-agent
Description	When configured, this command uses the user agent as the target name. The agent is a string consisting of <i>node-name:vendor:model:software-version</i> .
Notes	The following elements are part of a choice: custom-string , node-name , or user-agent .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp-vse *boolean*

Synopsis	Enable vendor-specific extensions to ICMP
Context	configure system icmp-vse <i>boolean</i>
Tree	icmp-vse
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip

Synopsis	Enter the ip context
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Context	configure system ip
Tree	ip
Description	Commands in this context configure system-wide IP router options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

buffer-unresolved-packets *boolean*

Synopsis	Buffer unresolved packets during ARP
Context	configure system ip buffer-unresolved-packets <i>boolean</i>
Tree	buffer-unresolved-packets
Description	<p>When configured to true, the system buffers IPv4 and IPv6 packets waiting for the address resolution process (ARP) or neighbor discovery (ND) reply.</p> <p>When configured to false, the system discards packets during the address resolution process. The system discards IPv4 and IPv6 traffic needing a destination resolution that is buffered while waiting for a response to avoid any potential of out-of-order delivery of packets to the resolved destination. As a result, after the ARP or ND entry is populated, the system delivers only newly received packets in order.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-unique-if-index *boolean*

Synopsis	Force creation of globally unique IP interface indexes
Context	configure system ip enforce-unique-if-index <i>boolean</i>
Tree	enforce-unique-if-index
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward-6in4 *boolean*

Synopsis	Allow forwarding of IPv6 over IPv4 to system IP address
Context	configure system ip forward-6in4 <i>boolean</i>
Tree	forward-6in4

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

forward-ip-over-gre *boolean*

Synopsis	Allow forwarding of IP over GRE to system IP address
Context	configure system ip forward-ip-over-gre <i>boolean</i>
Tree	forward-ip-over-gre
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-eh *keyword*

Synopsis	Number of IPv6 extension headers parsed in line cards
Context	configure system ip ipv6-eh <i>keyword</i>
Tree	ipv6-eh
Options	max, limited
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lACP

Synopsis	Enter the lACP context
Context	configure system lACP
Tree	lACP
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-priority *number*

Synopsis	LACP system priority on aggregated Ethernet interfaces
Context	configure system lACP system-priority <i>number</i>

Tree	system-priority
Range	1 to 65535
Default	32768
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lldp

Synopsis	Enter the lldp context
Context	configure system lldp
Tree	lldp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of LLDP
Context	configure system lldp admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message-fast-tx *number*

Synopsis	Interval at which LLDP frames are transmitted
Context	configure system lldp message-fast-tx number
Tree	message-fast-tx
Description	This command configures the interval at which LLDP frames are transmitted on behalf of the LLDP during a fast transmission period.
Range	1 to 3600
Units	seconds
Default	1
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

message-fast-tx-init *number*

Synopsis PDUs to transmit during the fast transmission period

Context **configure** [system lldp message-fast-tx-init](#) *number*

Tree [message-fast-tx-init](#)

Range 1 to 8

Default 4

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

notification-interval *number*

Synopsis Minimum interval between change notifications

Context **configure** [system lldp notification-interval](#) *number*

Tree [notification-interval](#)

Range 5 to 3600

Units seconds

Default 5

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

reinit-delay *number*

Synopsis Time required before re-initializing LLDP on a port

Context **configure** [system lldp reinit-delay](#) *number*

Tree [reinit-delay](#)

Range 1 to 10

Units seconds

Default 2

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tx-credit-max *number*

Synopsis	Maximum consecutive LLDPDUs that can be transmitted
Context	configure system lldp tx-credit-max <i>number</i>
Tree	tx-credit-max
Range	1 to 100
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-hold-multiplier *number*

Synopsis	Transmit interval multiplier
Context	configure system lldp tx-hold-multiplier <i>number</i>
Tree	tx-hold-multiplier
Range	2 to 10
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tx-interval *number*

Synopsis	LLDP transmit interval
Context	configure system lldp tx-interval <i>number</i>
Tree	tx-interval
Range	5 to 32768
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

load-balancing

Synopsis	Enter the load-balancing context
Context	configure system load-balancing

Tree	load-balancing
Description	<p>Commands in this context configure the interface per-flow load-balancing options that apply to traffic entering this interface and egressing over a LAG or ECMP on system egress. This setting is per interface.</p> <p>Load-balancing options configured at the interface level overwrite load-balancing options configured at the system level.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

l4-load-balancing *boolean*

Synopsis	Use load balancing based on Layer 4 fields
Context	configure system load-balancing l4-load-balancing <i>boolean</i>
Tree	l4-load-balancing
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lsr-load-balancing *keyword*

Synopsis	Algorithm for system-wide LSR load balancing
Context	configure system load-balancing lsr-load-balancing <i>keyword</i>
Tree	lsr-load-balancing
Description	<p>This command configures system-wide LSR load balancing. Hashing can be enabled on the label stack, IP header, or both. The hashing can be at an LSR for spraying labeled IP packets over multiple equal-cost paths, or over multiple links of a LAG group.</p> <p>The LSR hash routine operates on the label stack and the IP header, if a packet is IPv4. An LSR considers a packet to be IPv4 if the first nibble following the bottom of the label stack is 4. The hash on the label stack and IPv4 and IPv6 headers can be enabled or disabled at the system level or incoming network IP interface level.</p> <p>lbl-ip-l4-teid - Specifies that the hashing applies as follows for Layer 2 and Layer 3 encapsulated traffic:</p> <ul style="list-style-type: none"> • If an IPv4 or IPv6 header is found immediately after the MPLS label stack, the hashing includes label stack, source and destination IP addresses, TCP/UDP port numbers, and, if present, TEID values. • If an IPv4 or IPv6 header is not found immediately after the MPLS label stack, the data plane searches for a valid Ethertype value for the IPv4 and IPv6 payload. If a valid Ethertype value is found and an IP header follows the Ethernet header, hashing includes the source and destination IP addresses, TCP/UDP port numbers, and, if present, TEID values.

eth-encap-ip - Specifies that the hash algorithm parses down the label stack and after it reaches the bottom, the stack assumes the Ethernet II non-tagged, dot1q, or QinQ header follows. At the expected Ethertype offset location, the algorithm checks whether the value present is IPv4/IPv6 (0x0800/0x86DD). If the check passes, the hash algorithm checks the first nibble at the expected IP header location for IPv4/IPv6 (0x0100/0x0110). If the secondary check passes, the algorithm performs the hash using the IP SA/DA fields in the expected IP header. If any of the checks fail, the label-stack hash is performed.

Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid, lbl-eth-ip-l4-teid, lbl-ip-or-teid
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-id-lag-hashing *boolean*

Synopsis	Enable enhanced VLL LAG service ID hashing
Context	configure system load-balancing service-id-lag-hashing <i>boolean</i>
Tree	service-id-lag-hashing
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location *description*

Synopsis	Site location of the system
Context	configure system location <i>description</i>
Tree	location
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

login-control

Synopsis	Enter the login-control context
Context	configure system login-control
Tree	login-control
Description	Commands in this context configure the session control for console, Telnet, SSH, and FTP sessions.

	(none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exponential-backoff *boolean*

Synopsis	Enable exponential-backoff of the login prompt
Context	configure system login-control exponential-backoff <i>boolean</i>
Tree	exponential-backoff
Description	When configured to true , the router enables exponential backoff for the login prompt. The exponential-backoff command is used to deter dictionary attacks, when a malicious user can gain access to the CLI by using a script to attempt to log in to the admin account with any conceivable password. (none)
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ftp

Synopsis	Enter the ftp context
Context	configure system login-control ftp
Tree	ftp
Description	Commands in this context configure FTP login control command options. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound FTP sessions
Context	configure system login-control ftp inbound-max-sessions <i>number</i>
Tree	inbound-max-sessions
Description	This command configures the maximum number of concurrent inbound FTP sessions. This value is the combined total of inbound and outbound sessions. (none)

Range	0 to 5
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-timeout (*keyword* | *number*)

Synopsis	Idle timeout for console, FTP, Telnet, and SSH sessions
Context	configure system login-control idle-timeout (<i>keyword</i> <i>number</i>)
Tree	idle-timeout
Range	1 to 1440
Units	minutes
Options	none
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

login-banner *boolean*

Synopsis	Display the SR OS login banner
Context	configure system login-control login-banner <i>boolean</i>
Tree	login-banner
Description	When configured to true , the system displays the SR OS login banner. The login banner contains the SR OS copyright and build date information. false , the system only displays the configured pre-login message and the login prompt. (none)
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

login-scripts

Synopsis	Enter the login-scripts context
Context	configure system login-control login-scripts
Tree	login-scripts

Description	Commands in this context configure CLI scripts that execute when a user (authenticated via any method including local user database, TACACS+, or RADIUS) first logs into a CLI session. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

global-script *string-not-all-spaces*

Synopsis	URL of the global CLI login script
Context	configure system login-control login-scripts global-script <i>string-not-all-spaces</i>
Tree	global-script
Description	<p>This command specifies a common CLI script that executes when any user logs into a CLI session. This login exec script is executed when any user (authenticated by any means including local user database, TACACS+, or RADIUS) opens a CLI session. This allows a user, for example, to define a common set of CLI aliases that are made available on the router for all users. This global login exec script is executed before any user-specific login exec files that may be configured.</p> <p>This CLI script executes in the context of the user who opens the CLI session. Any commands in the script that the user is not authorized to execute will fail.</p> <p>(none)</p>
String length	1 to 180
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

per-user-script

Synopsis	Enter the per-user-script context
Context	configure system login-control login-scripts per-user-script
Tree	per-user-script
Description	<p>Commands in this context allow users to define their own login scripts that can be executed each time they first login to a CLI session. The command executes the script "<i>file-url / username / file-name</i>" when the user <i>username</i> logs into a CLI session (authenticated by any means including local user database, TACACS+, or RADIUS).</p> <p>For example:</p> <p>per-user user-directory "cf1:/local/users" file-name "login-script.txt"</p> <p>would search for the following script when user "admin" logs in and authenticates via RADIUS:</p>

cf1:/local/users/admin/login-script.txt

The per user login script is executed after any global script executes and before any login-exec script configured against a local user is executed. This allows users, for example, who are authenticated via TACACS+ or RADIUS to define their own login scripts.

This CLI script executes in the context of the user who opens the CLI session. Any commands in the script that the user is not authorized to execute will fail.

(none)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

file-name *filename*

Synopsis File name of the per-user login script

Context **configure** **system** **login-control** **login-scripts** **per-user-script** **file-name** *filename*

Tree **file-name**

Description This command specifies the name of the file (located in the **configure system login-control login-scripts per-user-script user-directory** directory) including the extension.

(none)

String length 1 to 180

String format 'filename' must not contain / or \ (no path separators)
'filename' must not be all spaces

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

user-directory *string-not-all-spaces*

Synopsis Directory name of user-defined login script

Context **configure** **system** **login-control** **login-scripts** **per-user-script** **user-directory** *string-not-all-spaces*

Tree **user-directory**

String length 1 to 180

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

motd

Synopsis	Enter the motd context
Context	configure system login-control motd
Tree	motd
Description	Commands in this context configure the message of the day that is displayed after a successful login. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

text *string-not-all-spaces*

Synopsis	Message of the day displayed after a succesfull login
Context	configure system login-control motd text <i>string-not-all-spaces</i>
Tree	text
String length	1 to 900
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: text or url .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

url *string-not-all-spaces*

Synopsis	Location of the message of the day
Context	configure system login-control motd url <i>string-not-all-spaces</i>
Tree	url
String length	1 to 180
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	The following elements are part of a choice: text or url .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pre-login-message

Synopsis	Enter the pre-login-message context
Context	configure system login-control pre-login-message
Tree	pre-login-message
Description	<p>Commands in this context configure a message to display before logging in to the router.</p> <p>Only one message can be configured. If a new pre-login message is configured, the new message overwrites the previous message.</p> <p>The pre-login message is displayed on both active and standby CPMs.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

message *string-not-all-spaces*

Synopsis	Pre-login message displayed before the login prompt
Context	configure system login-control pre-login-message message <i>string-not-all-spaces</i>
Tree	message
Description	<p>This command configures the pre-login message.</p> <p>Any printable, 7-bit ASCII characters can be used. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Some special characters can be used to format the message text. Use the newline () character to create multiline messages. A newline () character in the message moves to the beginning of the next line by sending ASCII/UTF-8 characters 0xA (LF) and 0xD (CR) to the client terminal. A carriage return () character in the message sends the ASCII/UTF-8 character 0xD (CR) to the client terminal.</p>
String length	1 to 900
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *boolean*

Synopsis	Display the system name after the pre-login message
Context	configure system login-control pre-login-message name <i>boolean</i>
Tree	name
Description	When configured to true , the system displays a space followed by the system name after the pre-login message before the login prompt.

	When configured to false , the system only displays the configured pre-login message and the login prompt.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh

Synopsis	Enter the ssh context
Context	configure system login-control ssh
Tree	ssh
Description	Commands in this context configure the SSH command options. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-shutdown *boolean*

Synopsis	Allow graceful shutdown of SSH sessions
Context	configure system login-control ssh graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound sessions
Context	configure system login-control ssh inbound-max-sessions <i>number</i>
Tree	inbound-max-sessions
Range	0 to 50
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-channels-per-connection *number*

Synopsis	Maximum number of channels per SSH connection
Context	configure system login-control ssh max-channels-per-connection <i>number</i>
Tree	max-channels-per-connection
Range	1 to 50
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound-max-sessions *number*

Synopsis	Maximum number of concurrent outbound sessions
Context	configure system login-control ssh outbound-max-sessions <i>number</i>
Tree	outbound-max-sessions
Description	This command configures the maximum number of outbound Telnet and SSH sessions. The local serial port cannot be disabled. (none)
Range	0 to 15
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	configure system login-control ssh ttl-security <i>number</i>
Tree	ttl-security
Description	This command configures TTL security command options for incoming packets. When the feature is enabled, LDP accepts incoming IP packets from a peer only if the TTL value in the packet is greater than or equal to the minimum TTL value configured for that peer. Per-peer-queueing must be enabled in order for TTL protection to operate. (none)
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet

Synopsis	Enter the telnet context
Context	configure system login-control telnet
Tree	telnet
Description	Commands in this context configure the Telnet command options. (none)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

graceful-shutdown *boolean*

Synopsis	Allow graceful shutdown of Telnet sessions
Context	configure system login-control telnet graceful-shutdown <i>boolean</i>
Tree	graceful-shutdown
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inbound-max-sessions *number*

Synopsis	Maximum number of concurrent inbound sessions
Context	configure system login-control telnet inbound-max-sessions <i>number</i>
Tree	inbound-max-sessions
Range	0 to 50
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outbound-max-sessions *number*

Synopsis	Maximum number of concurrent outbound sessions
Context	configure system login-control telnet outbound-max-sessions <i>number</i>
Tree	outbound-max-sessions

Description	This command configures the maximum number of outbound Telnet and SSH sessions. The local serial port cannot be disabled. (none)
Range	0 to 15
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	configure system login-control telnet ttl-security <i>number</i>
Tree	ttl-security
Description	This command configures TTL security command options for incoming packets. When the feature is enabled, LDP accepts incoming IP packets from a peer only if the TTL value in the packet is greater than or equal to the minimum TTL value configured for that peer. Per-peer-queueing must be enabled in order for TTL protection to operate. (none)
Range	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-interface

Synopsis	Enter the management-interface context
Context	configure system management-interface
Tree	management-interface
Description	Commands in this context configure the capabilities of router management interfaces such as the CLI and NETCONF.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli

Synopsis	Enter the cli context
Context	configure system management-interface cli

Tree	cli
Description	Commands in this context configure the CLI management interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

classic-cli

Synopsis	Enter the classic-cli context
Context	configure system management-interface cli classic-cli
Tree	classic-cli
Description	Commands in this context configure the classic CLI management interface.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-immediate *boolean*

Synopsis	Allow writable access in classic CLI configure branch
Context	configure system management-interface cli classic-cli allow-immediate <i>boolean</i>
Tree	allow-immediate
Description	<p>When configured to true, this command enables write access in the classic CLI configuration branch without having to use the classic CLI candidate edit functionality.</p> <p>When configured to false, this command blocks write access and configuration changes in the classic CLI configuration branch, and the classic CLI configuration branch is read-only. This enforces using the classic CLI candidate edit functionality, including candidate commit, to modify the router configuration, instead of allowing immediate line-by-line configuration changes.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rollback

Synopsis	Enter the rollback context
Context	configure system management-interface cli classic-cli rollback
Tree	rollback
Description	Commands in this context control classic CLI configuration rollback functionality, such as the maximum number of rollback checkpoints the system maintains. Configuration

rollback allows the operator to revert to previous router configuration states while minimizing impacts to services.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-checkpoints *number*

Synopsis	Maximum number of rollback files on local storage
Context	configure system management-interface cli classic-cli rollback local-checkpoints <i>number</i>
Tree	local-checkpoints
Range	1 to 50
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location *url*

Synopsis	Path and filename prefix for rollback checkpoint files
Context	configure system management-interface cli classic-cli rollback location <i>url</i>
Tree	location
Description	This command configures the local (for example, compact flash) or remote location and name of the classic CLI rollback checkpoint files. The filename must not contain a suffix. The suffixes for rollback checkpoint files are, for example, .rb, .rb.1, .rb.2, and so on. The suffixes are automatically appended to rollback checkpoint files.
String length	1 to 180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-checkpoints *number*

Synopsis	Maximum rollback files saved at a remote location
Context	configure system management-interface cli classic-cli rollback remote-checkpoints <i>number</i>
Tree	remote-checkpoints
Range	1 to 200
Default	10

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rescue

Synopsis	Enter the rescue context
Context	configure system management-interface cli classic-cli rollback rescue
Tree	rescue
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location *url*

Synopsis	Location of the rescue configuration file
Context	configure system management-interface cli classic-cli rollback rescue location <i>url</i>
Tree	location
Description	This command configures the local or remote location and filename of the classic CLI rescue configuration file. The suffix (.rc) is automatically appended to the filename when a rescue configuration file is saved. Trivial FTP (TFTP) is not supported for remote locations.
String length	1 to 180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-engine *keyword*

Synopsis	System-wide CLI engine access
Context	configure system management-interface cli cli-engine <i>keyword</i>
Tree	cli-engine
Description	This command configures the system-wide CLI engine. The operator can configure one or both engines. For the configuration to take effect, exit the running CLI session and start a new session after committing the new value.
Options	classic-cli, md-cli
Max. instances	2
Notes	This element is ordered by the user.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

md-cli

Synopsis Enter the **md-cli** context

Context **configure** [system management-interface cli md-cli](#)

Tree [md-cli](#)

Description Commands in this context configure the MD-CLI management interface.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

auto-config-save *boolean*

Synopsis Automatically save configuration as part of commit

Context **configure** [system management-interface cli md-cli auto-config-save](#) *boolean*

Tree [auto-config-save](#)

Description When configured to **true**, the system automatically writes the running configuration to the saved configuration file as part of a successful commit operation.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

environment

Synopsis Enter the **environment** context

Context **configure** [system management-interface cli md-cli environment](#)

Tree [environment](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

command-alias

Synopsis Enter the **command-alias** context

Context **configure** [system management-interface cli md-cli environment command-alias](#)

Tree [command-alias](#)

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

alias [[alias-name](#)] *string*

Synopsis Enter the **alias** list instance

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#) *string*

Tree [alias](#)

Description Commands in this context create aliases to existing MD-CLI commands or to Python applications.

Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[alias-name] *string*

Synopsis Alias name

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#) *string*

Tree [alias](#)

String length 1 to 64

String format must only contain alpha-numeric characters, underscore or hyphen (not as the first character)

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the alias

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Description This command controls the administrative state of the MD-CLI alias.

MD-CLI aliases that are administratively disabled cannot be executed, are not displayed in command completion, and do not appear in `? help`.

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-command *string*

Synopsis	CLI command to run when executing the alias
Context	configure system management-interface cli md-cli environment command-alias alias <i>string</i> cli-command <i>string</i>
Tree	cli-command
String length	1 to 255
Notes	The following elements are part of a mandatory choice: cli-command or python-script .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *string-not-all-spaces*

Synopsis	Alias description
Context	configure system management-interface cli md-cli environment command-alias alias <i>string</i> description <i>string-not-all-spaces</i>
Tree	description
String length	1 to 110
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mount-point [[path](#)] (*keyword* | *string*)

Synopsis	Add a list entry for mount-point
Context	configure system management-interface cli md-cli environment command-alias alias <i>string</i> mount-point (<i>keyword</i> <i>string</i>)
Tree	mount-point

Min. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[path] (*keyword* | *string*)

Synopsis	Mount point where the alias is available
Context	configure system management-interface cli md-cli environment command-alias alias <i>string</i> mount-point (<i>keyword</i> <i>string</i>)
Tree	mount-point
String length	1 to 255
String format	must start with forward slash
Options	global
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python-script *reference*

Synopsis	Python script to run when executing the alias
Context	configure system management-interface cli md-cli environment command-alias alias <i>string</i> python-script <i>reference</i>
Tree	python-script
Reference	configure python python-script <i>named-item</i>
Notes	The following elements are part of a mandatory choice: cli-command or python-script .
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

command-completion

Synopsis	Enter the command-completion context
Context	configure system management-interface cli md-cli environment command-completion
Tree	command-completion
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

enter *boolean*

Synopsis Complete the command when the Enter key is pressed

Context **configure** [system management-interface cli md-cli environment command-completion](#)
[enter](#) *boolean*

Tree [enter](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

space *boolean*

Synopsis Complete the command when the Space key is pressed

Context **configure** [system management-interface cli md-cli environment command-completion](#)
[space](#) *boolean*

Tree [space](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tab *boolean*

Synopsis Complete the command when the Tab key is pressed

Context **configure** [system management-interface cli md-cli environment command-completion](#)
[tab](#) *boolean*

Tree [tab](#)

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

commit-options

Synopsis Enter the **commit-options** context

Context **configure** [system management-interface cli md-cli environment commit-options](#)

Tree	commit-options
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

comment *boolean*

Synopsis	Require a commit comment when committing configuration
Context	configure system management-interface cli md-cli environment commit-options comment <i>boolean</i>
Tree	comment
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

confirm *boolean*

Synopsis	Require confirmed commit when committing configuration
Context	configure system management-interface cli md-cli environment commit-options confirm <i>boolean</i>
Tree	confirm
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console

Synopsis	Enter the console context
Context	configure system management-interface cli md-cli environment console
Tree	console
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length *number*

Synopsis	Number of lines displayed on the console
Context	configure system management-interface cli md-cli environment console length <i>number</i>

Tree	length
Range	24 to 512
Default	24
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

width *number*

Synopsis	Number of columns displayed on the console
Context	configure system management-interface cli md-cli environment console width <i>number</i>
Tree	width
Range	80 to 512
Default	80
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

history

Synopsis	Enter the history context
Context	configure system management-interface cli md-cli environment history
Tree	history
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

recall *boolean*

Synopsis	Allow command history recall and search execution
Context	configure system management-interface cli md-cli environment history recall <i>boolean</i>
Tree	recall
Description	<p>When configured to true, the command history recall (!), substitution (!\$), display (:p, Esc+.), and backward search (Ctrl-R) are enabled.</p> <p>When configured to false, the command history can be displayed using the history command, but commands in the history cannot be executed.</p>
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

size *number*

Synopsis Command history size

Context **configure** [system management-interface cli md-cli environment history size](#) *number*

Tree [size](#)

Description This command specifies the maximum size of the command history. A value of 0 disables the command history.

Range 0 to 1000

Default 50

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

info-output

Synopsis Enter the **info-output** context

Context **configure** [system management-interface cli md-cli environment info-output](#)

Tree [info-output](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

always-display

Synopsis Enter the **always-display** context

Context **configure** [system management-interface cli md-cli environment info-output always-display](#)

Tree [always-display](#)

Description Commands in this context specify elements that are always displayed in the **info** output, regardless of whether the **detail** option is used.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *boolean*

Synopsis Always display admin-state elements

Context	configure system management-interface cli md-cli environment info-output always-display admin-state <i>boolean</i>
Tree	admin-state
Description	When configured to true , the values of the admin-state elements in info output (without the detail option) are always displayed, even if they are the default values.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match-highlight

Synopsis	Enter the match-highlight context
Context	configure system management-interface cli md-cli environment match-highlight
Tree	match-highlight
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of match highlighting
Context	configure system management-interface cli md-cli environment match-highlight admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

style *keyword*

Synopsis	Match highlighting style
Context	configure system management-interface cli md-cli environment match-highlight style <i>keyword</i>
Tree	style
Options	bold, underline, reverse

Max. instances	3
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

message-severity-level

Synopsis	Enter the message-severity-level context
Context	configure system management-interface cli md-cli environment message-severity-level
Tree	message-severity-level
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli keyword

Synopsis	Message severity threshold for CLI messages
Context	configure system management-interface cli md-cli environment message-severity-level cli keyword
Tree	cli
Options	warning, info
Default	info
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

more boolean

Synopsis	Activate the pager when output is longer than a screen
Context	configure system management-interface cli md-cli environment more <i>boolean</i>
Tree	more
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

progress-indicator

Synopsis	Enter the progress-indicator context
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Context	configure system management-interface cli md-cli environment progress-indicator
Tree	progress-indicator
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the progress indicator
Context	configure system management-interface cli md-cli environment progress-indicator admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay *number*

Synopsis	Delay before the progress indicator is displayed
Context	configure system management-interface cli md-cli environment progress-indicator delay <i>number</i>
Tree	delay
Range	0 to 10000
Units	milliseconds
Default	1000
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	Progress indicator output style
Context	configure system management-interface cli md-cli environment progress-indicator type <i>keyword</i>
Tree	type
Options	dots
Default	dots

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prompt

Synopsis	Enter the prompt context
Context	configure system management-interface cli md-cli environment prompt
Tree	prompt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

context *boolean*

Synopsis	Show the current command context in the prompt
Context	configure system management-interface cli md-cli environment prompt context <i>boolean</i>
Tree	context
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

newline *boolean*

Synopsis	Add a new line before every prompt line
Context	configure system management-interface cli md-cli environment prompt newline <i>boolean</i>
Tree	newline
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timestamp *boolean*

Synopsis	Show the timestamp before the first prompt line
Context	configure system management-interface cli md-cli environment prompt timestamp <i>boolean</i>
Tree	timestamp

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uncommitted-changes-indicator *boolean*

Synopsis	Show an asterisk (*) when uncommitted changes exist
Context	configure system management-interface cli md-cli environment prompt uncommitted-changes-indicator <i>boolean</i>
Tree	uncommitted-changes-indicator
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python

Synopsis	Enter the python context
Context	configure system management-interface cli md-cli environment python
Tree	python
Description	Commands in this context customize Python settings used with the Python 3 interpreter in MD-CLI applications such as pyexec, command aliases, EHS, and CRON.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

memory-reservation *number*

Synopsis	Memory reserved per Python interpreter
Context	configure system management-interface cli md-cli environment python memory-reservation <i>number</i>
Tree	memory-reservation
Range	1 to 500
Units	megabytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-available-memory *number*

Synopsis	Minimum memory requirement to run a Python interpreter
Context	configure system management-interface cli md-cli environment python minimum-available-memory <i>number</i>
Tree	minimum-available-memory
Range	5 to 50
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Maximum run time before a Python application is stopped
Context	configure system management-interface cli md-cli environment python timeout <i>number</i>
Tree	timeout
Range	30 to 86400
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time-display *keyword*

Synopsis	Time zone to display time
Context	configure system management-interface cli md-cli environment time-display <i>keyword</i>
Tree	time-display
Description	<p>This command configures the time zone for a timestamp displayed in outputs, such as event logs and show commands for the current CLI session.</p> <p>In event logs, the selected time is used to control the timestamps in the CLI output of show log log-id and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).</p> <p>Also see the configure log log-id time-format command.</p>
Options	local, utc
Default	local
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

time-format *keyword*

Synopsis Format to display the date and time

Context **configure** [system management-interface cli md-cli environment time-format](#) *keyword*

Tree [time-format](#)

Description This command specifies the format of the time display in the prompt, configuration, state, and certain **show** command output in the current CLI session.

Options iso-8601, rfc-1123, rfc-3339

Default rfc-3339

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

commit-history *number*

Synopsis Number of commit history IDs to store

Context **configure** [system management-interface commit-history](#) *number*

Tree [commit-history](#)

Description This command sets the number of IDs to store in the commit history. Setting the value to 0 disables the commit history.

Range 0 to 200

Default 50

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

commit-management

Synopsis Enter the **commit-management** context

Context **configure** [system management-interface commit-management](#)

Tree [commit-management](#)

Introduced 25.10.R1

Platforms 7705 SAR Gen 2

python-scripts

Synopsis	Enter the python-scripts context
Context	configure system management-interface commit-management python-scripts
Tree	python-scripts
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

gnmi-trigger *boolean*

Synopsis	Trigger commit scripts from gNMI
Context	configure system management-interface commit-management python-scripts gnmi-trigger <i>boolean</i>
Tree	gnmi-trigger
Default	true
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

md-cli-trigger *boolean*

Synopsis	Trigger commit scripts from the MD-CLI
Context	configure system management-interface commit-management python-scripts md-cli-trigger <i>boolean</i>
Tree	md-cli-trigger
Default	true
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

netconf-trigger *boolean*

Synopsis	Trigger commit scripts from NETCONF
Context	configure system management-interface commit-management python-scripts netconf-trigger <i>boolean</i>
Tree	netconf-trigger
Default	true
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

post-commit-python-script *reference*

Synopsis Python script to use for the post-commit script

Context **configure** [system management-interface](#) [commit-management](#) [python-scripts](#) [post-commit-python-script](#) *reference*

Tree [post-commit-python-script](#)

Reference **configure** [python](#) [python-script](#) *named-item*

Introduced 26.7.R1

Platforms 7705 SAR Gen 2

pre-commit-python-script *reference*

Synopsis Python script to use for the pre-commit script

Context **configure** [system management-interface](#) [commit-management](#) [python-scripts](#) [pre-commit-python-script](#) *reference*

Tree [pre-commit-python-script](#)

Reference **configure** [python](#) [python-script](#) *named-item*

Introduced 26.7.R1

Platforms 7705 SAR Gen 2

configuration-mode *keyword*

Synopsis Management interfaces allowed to edit the configuration

Context **configure** [system management-interface](#) [configuration-mode](#) *keyword*

Tree [configuration-mode](#)

Description This command controls which of the classic or model-driven management interfaces can modify the configuration of the router.

Any management interface can be used in any configuration mode (to gather state information or perform operations, for example), but only specific management interfaces (CLI, NETCONF, and so on) are allowed to edit the configuration of the router in different modes. For example, only classic CLI and SNMP can be used to edit the configuration when in classic mode.

Options classic, model-driven, mixed

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

configuration-save

Synopsis	Enter the configuration-save context
Context	configure system management-interface configuration-save
Tree	configuration-save
Description	Commands in this context configure the attributes for saved configuration files.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

configuration-backups *number*

Synopsis	Maximum number of configuration versions maintained
Context	configure system management-interface configuration-save configuration-backups <i>number</i>
Tree	configuration-backups
Description	<p>This command configures the maximum number of saved configuration file versions the router maintains.</p> <p>When the configuration is saved, configuration file names are appended with a numeric extension. Each subsequent configuration save creates a new configuration file version with an incremented numeric extension until the maximum count is reached, after which the next configuration save overwrites the oldest file version.</p> <p>Each persistent index file is updated at the same time as the associated configuration file. The system synchronizes the active and standby CPM for all configurations and their associated persistent index files.</p>
Range	1 to 200
Default	50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

incremental-saves *boolean*

Synopsis	Use incremental saved configuration files
Context	configure system management-interface configuration-save incremental-saves <i>boolean</i>
Tree	incremental-saves
Description	When configured to true , the system saves each commit to the configure configuration region in a separate incremental saved configuration file, which allows for faster commits, instead of saving a complete saved configuration file each time.

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf

Synopsis	Enter the netconf context
Context	configure system management-interface netconf
Tree	netconf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-config-save *boolean*

Synopsis	Automatically save configuration as part of commit
Context	configure system management-interface netconf auto-config-save <i>boolean</i>
Tree	auto-config-save
Description	When configured to true , the system automatically writes the running configuration to the saved configuration file as part of a successful commit operation.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

call-home

Synopsis	Enter the call-home context
Context	configure system management-interface netconf call-home
Tree	call-home
Description	Commands in this context configure NETCONF Call Home, which enables an SR OS node to trigger a NETCONF client to start a connection.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

device-labels

Synopsis	Enter the device-labels context
Context	configure system management-interface netconf call-home device-labels
Tree	device-labels
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-operating-system *boolean*

Synopsis	Advertise the network operating system
Context	configure system management-interface netconf call-home device-labels advertise-operating-system <i>boolean</i>
Tree	advertise-operating-system
Description	When configured to true , the network operating system is encoded as a NETCONF capability.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-software-version *boolean*

Synopsis	Advertise the software version
Context	configure system management-interface netconf call-home device-labels advertise-software-version <i>boolean</i>
Tree	advertise-software-version
Description	When configured to true , the software version is encoded as a NETCONF capability.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

advertise-system-name *boolean*

Synopsis	Advertise the system name
Context	configure system management-interface netconf call-home device-labels advertise-system-name <i>boolean</i>

Tree	advertise-system-name
Description	When configured to true , the system name is encoded as a NETCONF capability.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

device-label *string*

Synopsis	Device label
Context	configure system management-interface netconf call-home device-labels device-label string
Tree	device-label
Description	This command encodes the device label as a NETCONF capability.
String length	1 to 16
String format	'device-label' must contain only letters, digits or underscores
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf-client [[name](#)] *named-item*

Synopsis	Enter the netconf-client list instance
Context	configure system management-interface netconf call-home netconf-client named-item
Tree	netconf-client
Description	Commands in this context configure the list of NETCONF clients with which the NETCONF server maintains simultaneous Call Home connections.
Max. instances	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Remote NETCONF client name
Context	configure system management-interface netconf call-home netconf-client named-item
Tree	netconf-client

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the NETCONF Call Home endpoint
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

connection-type *keyword*

Synopsis	Call Home connection type
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> connection-type <i>keyword</i>
Tree	connection-type
Options	persistent – Enable persistent connection mode
Default	persistent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-on-boot *number*

Synopsis	Delay for Call Home connections after system boot
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> delay-on-boot <i>number</i>
Tree	delay-on-boot
Range	1 to 3600
Units	seconds

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** [system](#) [management-interface](#) [netconf](#) [call-home](#) [netconf-client](#) *named-item*
[description](#) *description*
Tree [description](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

idle-timeout *number*

Synopsis NETCONF idle timeout for sessions
Context **configure** [system](#) [management-interface](#) [netconf](#) [call-home](#) [netconf-client](#) *named-item*
[idle-timeout](#) *number*
Tree [idle-timeout](#)
Description This command configures the idle timeout for sessions. If no messages are received during the configured idle timeout period, the session is terminated.
Range 1 to 10080
Units minutes
Introduced 26.3.R1
Platforms 7705 SAR Gen 2

remote-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the NETCONF client
Context **configure** [system](#) [management-interface](#) [netconf](#) [call-home](#) [netconf-client](#) *named-item*
[remote-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
Tree [remote-address](#)
Notes This element is mandatory.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

remote-port *number*

Synopsis	Port that the NETCONF client is listening on
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> remote-port <i>number</i>
Tree	remote-port
Range	1 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance or VPRN service name
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> router-instance <i>string</i>
Tree	router-instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-server-profile *reference*

Synopsis	TLS server profile used for NETCONF call-home sessions
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> tls-server-profile <i>reference</i>
Tree	tls-server-profile
Reference	configure system security tls server-tls-profile <i>named-item</i>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

transport *keyword*

Synopsis	Transport type
Context	configure system management-interface netconf call-home netconf-client <i>named-item</i> transport <i>keyword</i>
Tree	transport
Options	ssh – SSH transport type tls – TLS transport type

Default	ssh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

capabilities

Synopsis	Enter the capabilities context
Context	configure system management-interface netconf capabilities
Tree	capabilities
Description	Commands in this context configure explicit capabilities for the NETCONF server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

candidate *boolean*

Synopsis	Allow the NETCONF server to access candidate datastore
Context	configure system management-interface netconf capabilities candidate boolean
Tree	candidate
Description	<p>When configured to true, this command allows the SR OS NETCONF server to access the candidate configuration datastore. Configuring this command to true also enables using commit and discard-changes.</p> <p>When configure system management-interface configuration-mode is set to classic, the candidate capability is disabled, even if this command is configured to true.</p> <p>When configured to false, this command disables the SR OS NETCONF server from accessing the candidate datastore. If the candidate is disabled, requests that reference the candidate datastore return an error, and when a NETCONF client establishes a new session, the candidate capability is not advertised in the SR OS NETCONF Hello message.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

listen

Synopsis	Enter the listen context
Context	configure system management-interface netconf listen

Tree	listen
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of NETCONF server in listen mode
Context	configure system management-interface netconf listen admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-on-boot *number*

Synopsis	Delay before NETCONF server is operational after boot
Context	configure system management-interface netconf listen delay-on-boot <i>number</i>
Tree	delay-on-boot
Description	<p>This command configures the delay timer for NETCONF connections. When the timer expires, NETCONF becomes operational and connections are accepted. This delay prevents automation from managing the system while it is still converging.</p> <p>When no delay is configured, connections are accepted after the system boots and NETCONF becomes operational.</p>
Range	1 to 3600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

idle-timeout *number*

Synopsis	NETCONF idle timeout for sessions
Context	configure system management-interface netconf listen idle-timeout <i>number</i>
Tree	idle-timeout
Description	This command configures the idle timeout for sessions. If no messages are received during the configured idle timeout period, the session is terminated.

Range	1 to 10080
Units	minutes
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

port number

Synopsis	Port on which NETCONF server listens for connections
Context	configure system management-interface netconf listen port number
Tree	port
Description	<p>This command specifies the port on which the SR OS NETCONF server listens for new connections. One port can be configured for NETCONF management.</p> <p>The configured port applies to both non-VRN and VRN management. New NETCONF connections are able to use the configured port.</p> <p>For NETCONF connections not using VRN management, active NETCONF connections are not disconnected if the connection port changes. For NETCONF connections using VRN management, active NETCONF connections are disconnected if the connection port changes.</p>
Range	22 830 1024 to 49151
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-server-profile reference

Synopsis	TLS server profile used for NETCONF listen sessions
Context	configure system management-interface netconf listen tls-server-profile reference
Tree	tls-server-profile
Reference	configure system security tls server-tls-profile named-item
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

transport keyword

Synopsis	Transport type
Context	configure system management-interface netconf listen transport keyword
Tree	transport

Options	ssh – SSH transport type tls – TLS transport type
Default	ssh
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

tls-client-identity

Synopsis	Enter the tls-client-identity context
Context	configure system management-interface netconf tls-client-identity
Tree	tls-client-identity
Description	Commands in this context configure NETCONF client identities used to authenticate client connections over TLS.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

client [[id](#)] *number*

Synopsis	Enter the client list instance
Context	configure system management-interface netconf tls-client-identity client <i>number</i>
Tree	client
Description	Commands in this context configure client identities for NETCONF access, which consist of TLS client certificates mapped to local users in the SR OS database.
Max. instances	16
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[[id](#)] *number*

Synopsis	Client ID
Context	configure system management-interface netconf tls-client-identity client <i>number</i>
Tree	client
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	26.7.R1

Platforms 7705 SAR Gen 2

fingerprint *key-fingerprint-sha256*

Synopsis Certificate fingerprint

Context **configure** [system management-interface netconf](#) [tls-client-identity client](#) *number fingerprint key-fingerprint-sha256*

Tree [fingerprint](#)

Description This command configures the client certificate fingerprint. The fingerprint string is hashed using SHA-256 and encoded using Base64.

String length 43

String format 'fingerprint' must be Base64 with trimmed padding (43 chars)

Notes This element is mandatory.

Introduced 26.7.R1

Platforms 7705 SAR Gen 2

map-type *keyword*

Synopsis Mapping method for TLS certificate to username

Context **configure** [system management-interface netconf](#) [tls-client-identity client](#) *number map-type keyword*

Tree [map-type](#)

Description This command configures the method used by the router to determine the username in the SR OS database that matches to the client fingerprint in the TLS certificate.

Options specified – Use the username explicitly configured in the database
san-ip-address – Use the client IP address to derive the username

Notes This element is mandatory.

Introduced 26.7.R1

Platforms 7705 SAR Gen 2

user-name *reference*

Synopsis Username for the provided fingerprint

Context **configure** [system management-interface netconf](#) [tls-client-identity client](#) *number user-name reference*

Tree [user-name](#)

Description	This command assigns a username to the fingerprint for NETCONF client identity. This command applies only to client identities configured to use an explicitly configured username in the database.
Reference	configure system security user-params local-user user <i>named-item</i>
Notes	This element is mandatory.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

default-client

Synopsis	Enter the default-client context
Context	configure system management-interface netconf tls-client-identity default-client
Tree	default-client
Description	Commands in this context configure the default NETCONF client identity used when the client fingerprint does not match any entry in the database.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

user-name *reference*

Synopsis	Default username to use when no fingerprint matches
Context	configure system management-interface netconf tls-client-identity default-client user-name <i>reference</i>
Tree	user-name
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

operations

Synopsis	Enter the operations context
Context	configure system management-interface operations
Tree	operations
Description	Commands in this context configure parameters associated with operational commands in model-driven interfaces.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

global-timeouts

Synopsis	Enter the global-timeouts context
Context	configure system management-interface operations global-timeouts
Tree	global-timeouts
Description	<p>Commands in this context configure system timeout parameters for operational commands.</p> <p>Timeout parameters provide default system-level control for various types of operational commands in model-driven interfaces. The timeout values are used when specific execution and retention timeouts are not requested for a specific operation.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asynchronous-execution (*number* | *keyword*)

Synopsis	Timeout for asynchronous operation execution
Context	configure system management-interface operations global-timeouts asynchronous-execution (<i>number</i> <i>keyword</i>)
Tree	asynchronous-execution
Description	<p>This command configures the period of time that operations launched as “asynchronous” are allowed to execute before being automatically stopped by the SR OS.</p> <p>An asynchronous operation is not deleted from the system when it is stopped. See the asynchronous-retention command.</p> <p>If a specific execution timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.</p> <p>Note: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the ping operation also has its own timeout parameter).</p>
Range	1 to 604800
Units	seconds
Options	never
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

asynchronous-retention (*number* | *keyword*)

Synopsis	Timeout for asynchronous operation data retention
Context	configure system management-interface operations global-timeouts asynchronous-retention (<i>number</i> <i>keyword</i>)
Tree	asynchronous-retention
Description	<p>This command configures the period of time that data related to operations launched as “asynchronous” is retained in the system. After the retention timeout expires, all information related to the operation is deleted, including any status information and result data.</p> <p>If a specific retention timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.</p>
Range	1 to 604800
Units	seconds
Options	never
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

synchronous-execution (*number* | *keyword*)

Synopsis	Timeout for synchronous operation execution
Context	configure system management-interface operations global-timeouts synchronous-execution (<i>number</i> <i>keyword</i>)
Tree	synchronous-execution
Description	<p>This command configures the period of time that operations launched as “synchronous” (the default method for all operations) are allowed to execute before they are automatically stopped, and their associated data is deleted.</p> <p>If a specific execution timeout is not included in the request for a particular synchronous operation, this system-level timeout applies.</p> <p>Note: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the ping operation also has its own timeout parameter).</p> <p>Caution: If this command is set with a specific time value, MD-CLI operations are subject to the timeout and are interrupted if they execute longer than the time value. This situation can arise because the timeout also applies to operations requested in the MD-CLI interface (for example, ping, file dir, and so on).</p>
Range	1 to 604800
Units	seconds

Options	never
Default	never
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

schema-path *url*

Synopsis	Schema path URL
Context	configure system management-interface schema-path <i>url</i>
Tree	schema-path
Description	<p>This command specifies the schema path where the SR OS YANG modules can be placed by the user before using a <get-schema> request. Nokia recommends that the URL string not exceed 135 characters for the <get-schema> request to work correctly with all schema files.</p> <p>If this command is not configured, the software upgrade process manages the YANG schema files to ensure the schema files are synchronized with the software image on both the primary and standby CPM.</p>
String length	1 to 180
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp

Synopsis	Enter the snmp context
Context	configure system management-interface snmp
Tree	snmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the SNMP agent
Context	configure system management-interface snmp admin-state <i>keyword</i>
Tree	admin-state
Description	This command administratively enables or disables SNMP agent operations. Disabling SNMP does not prevent the agent from sending SNMP notifications to configured SNMP trap destinations.

In classic and mixed configuration mode, the agent is administratively disabled in the event of a reboot when the processing of the configuration file fails to complete or when an SNMP persistent index file fails while the **bof system persistent-indices** command is set to **true**. This prevents an SNMP-based management system from accessing and possibly synchronizing with a partially booted or incomplete network element. This auto-disable behavior is not applicable to model-driven configuration mode.

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

engine-id *engine-id-as-string*

Synopsis	SNMP engine ID that identifies the SNMPv3 node
Context	configure system management-interface snmp engine-id <i>engine-id-as-string</i>
Tree	engine-id
Description	<p>This command sets the SNMP engine ID that uniquely identifies the SNMPv3 node.</p> <p>If unconfigured, the system uses an engine ID based on the information from the system backplane.</p> <p>If the SNMP engine ID is changed, the current configuration must be saved and a reboot must be executed. Otherwise, the previously configured SNMP communities and logger trap-target notify communities will not be valid for the new engine ID.</p> <p>Note: Changing the SNMP engine ID invalidates all SNMPv3 MD5 and SHA security digest keys, which may render the node unmanageable.</p> <p>When replacing a chassis, configure the new router to use the same engine ID as the previous router. This preserves SNMPv3 security keys and allows management stations to use their existing authentication keys for the new router.</p> <p>Ensure that the engine ID of each router is unique. A management domain can only maintain one instance of a specific engine ID.</p>
String length	10 to 64
String format	'engine-id-as-string' must be hexadecimal digits only (length 10..64)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

general-port *number*

Synopsis	Port number used to send general SNMP messages
Context	configure system management-interface snmp general-port <i>number</i>
Tree	general-port

Description	This command configures the port number used to receive SNMP request messages and send replies. For the port used for SNMP notifications, configure the configure log snmp-trap-group trap-target port command.
Range	0 1 to 65535
Default	161
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-bulk-duration *number*

Synopsis	Maximum process duration before responses are returned
Context	configure system management-interface snmp max-bulk-duration <i>number</i>
Tree	max-bulk-duration
Description	This command sets the maximum duration to process an SNMP request before bulk responses are returned to avoid a timeout on the management system when a lot of information is returned in the response.
Range	100 to 5000
Units	milliseconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packet-size *number*

Synopsis	Maximum SNMP packet size generated by the node
Context	configure system management-interface snmp packet-size <i>number</i>
Tree	packet-size
Range	484 to 9216
Default	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

streaming

Synopsis	Enter the streaming context
Context	configure system management-interface snmp streaming

Tree	streaming
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of SNMP streaming
Context	configure system management-interface snmp streaming admin-state <i>keyword</i>
Tree	admin-state
Description	This command enables or disables the proprietary SNMP request and response bundling as well as the TCP-based transport mechanism for optimizing network management of the router nodes. In higher latency networks, synchronizing router MIBs from network management using streaming takes less time than synchronizing using classic SNMP UDP requests. Streaming operates on TCP port 1491 and runs over IPv4 or IPv6.
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transport *keyword*

Synopsis	Transport protocol used by the SNMP agent
Context	configure system management-interface snmp transport <i>keyword</i>
Tree	transport
Options	udp – UDP only tcp – TCP only both – TCP and UDP
Default	udp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

yang-modules

Synopsis	Enter the yang-modules context
Context	configure system management-interface yang-modules
Tree	yang-modules

Description	<p>Commands in this context determine the system support of the Nokia YANG models.</p> <p>The settings affect the data sent in a NETCONF <hello>, data populated in the RFC 6022 /netconf-state/schemas list, data returned in a <get-schema> request, and data populated in the RFC 8525 /yang-library.</p> <p>See "NETCONF monitoring" and "YANG library" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nmda

Synopsis	Enter the nmda context
Context	configure system management-interface yang-modules nmda
Tree	nmda
Description	Commands in this context configure the attributes for the Network Management Datastores Architecture (NMDA).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nmda-support *boolean*

Synopsis	Advertise NMDA support over NETCONF
Context	configure system management-interface yang-modules nmda nmda-support <i>boolean</i>
Tree	nmda-support
Description	<p>When configured to true, this command enables the advertisement of NMDA support over NETCONF through the use of YANG library 1.1.</p> <p>When configured to false, this command disables NMDA advertisement over NETCONF and YANG library 1.0 is used.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-combined-modules *boolean*

Synopsis	Support access to combined Nokia YANG models
Context	configure system management-interface yang-modules nokia-combined-modules <i>boolean</i>

Tree	nokia-combined-modules
Description	<p>When configured to true, the system supports the combined Nokia YANG files for both configuration and state data in the NETCONF server.</p> <p>When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to true.</p> <p>When configured to false, access to the combined Nokia YANG files is not supported.</p> <p>This command and the nokia-submodules command cannot both be set to true at the same time.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-submodules *boolean*

Synopsis	Support submodule-based packaging of Nokia YANG models
Context	configure system management-interface yang-modules nokia-submodules <i>boolean</i>
Tree	nokia-submodules
Description	<p>When configured to true, the system supports the alternative submodule-based packaging of the Nokia YANG files for both configuration and state data in the NETCONF server.</p> <p>When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to true.</p> <p>When configured to false, access to the submodule-based packaging of the Nokia YANG files is not supported.</p> <p>This command and the nokia-combined-modules command cannot both be set to true at the same time.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *named-item-64*

Synopsis	Administrative name assigned to the system
Context	configure system name <i>named-item-64</i>
Tree	name
String length	1 to 64

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

network-element-discovery

Synopsis Enter the **network-element-discovery** context

Context **configure** [system](#) [network-element-discovery](#)

Tree [network-element-discovery](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

generate-traps *boolean*

Synopsis Generate NE discovery traps

Context **configure** [system](#) [network-element-discovery](#) [generate-traps](#) *boolean*

Tree [generate-traps](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile [[name](#)] *named-item*

Synopsis Enter the **profile** list instance

Context **configure** [system](#) [network-element-discovery](#) [profile](#) *named-item*

Tree [profile](#)

Max. instances 1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis Profile name

Context **configure** [system](#) [network-element-discovery](#) [profile](#) *named-item*

Tree	profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neid string

Synopsis	Network element ID of the advertised node
Context	configure system network-element-discovery profile <i>named-item</i> neid string
Tree	neid
String length	7 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

neip

Synopsis	Enter the neip context
Context	configure system network-element-discovery profile <i>named-item</i> neip
Tree	neip
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-generate

Synopsis	Enter the auto-generate context
Context	configure system network-element-discovery profile <i>named-item</i> neip auto-generate
Tree	auto-generate
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4

Synopsis	Enable the ipv4 context
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Context	configure system network-element-discovery profile <i>named-item</i> neip auto-generate ipv4
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-id-value *number*

Synopsis	Most significant byte if the NE IPv4 address
Context	configure system network-element-discovery profile <i>named-item</i> neip auto-generate ipv4 vendor-id-value <i>number</i>
Tree	vendor-id-value
Range	1 to 255
Default	140
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enable the ipv6 context
Context	configure system network-element-discovery profile <i>named-item</i> neip auto-generate ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-id-value *number*

Synopsis	Most significant byte of the NE IPv6 address
Context	configure system network-element-discovery profile <i>named-item</i> neip auto-generate ipv6 vendor-id-value <i>number</i>
Tree	vendor-id-value
Range	1 to 255
Default	140
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *ipv4-unicast-address*

Synopsis	NEIP IPv4 address
Context	configure system network-element-discovery profile <i>named-item</i> neip ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 *ipv6-address*

Synopsis	NEIP IPv6 address
Context	configure system network-element-discovery profile <i>named-item</i> neip ipv6 <i>ipv6-address</i>
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

platform-type *named-item-255*

Synopsis	Platform name and chassis type to be advertised
Context	configure system network-element-discovery profile <i>named-item</i> platform-type <i>named-item-255</i>
Tree	platform-type
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-mac *mac-unicast-address-no-zero*

Synopsis	MAC address of the advertised node
Context	configure system network-element-discovery profile <i>named-item</i> system-mac <i>mac-unicast-address-no-zero</i>
Tree	system-mac

String format	'ieee-address' must be 6 hex byte pairs with ':' or '-' (e.g. 00:11:22:33:44:55)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vendor-id *named-item-255*

Synopsis	Vendor ID to be advertised
Context	configure system network-element-discovery profile <i>named-item</i> vendor-id <i>named-item-255</i>
Tree	vendor-id
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Default	Nokia
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ospf-dynamic-hostnames *boolean*

Synopsis	Process received OSPF dynamic hostname information
Context	configure system ospf-dynamic-hostnames <i>boolean</i>
Tree	ospf-dynamic-hostnames
Description	<p>When configured to true, OSPF dynamic hostnames are enabled. The router receiving the new dynamic hostname within the OSPF Router Information (RI) LSA is instructed to process the received dynamic hostname information.</p> <p>When configured to false, dynamic hostname information is not processed.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

persistence

Synopsis	Enter the persistence context
Context	configure system persistence
Tree	persistence
Description	Commands in this context configure persistence on the system.

The persistence feature enables the system to retain state information learned through DHCP snooping across reboots. This information includes data such as the IP address and MAC binding information, lease-length information, and ingress SAP information (required for VPLS snooping to identify the ingress interface).

If persistence is enabled when there are no DHCP relay or snooping commands enabled, the system creates an empty file.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ancp

Synopsis	Enter the ancp context
Context	configure system persistence ancp
Tree	ancp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system persistence ancp description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	configure system persistence ancp location <i>keyword</i>
Tree	location
Options	cf1, cf2, cf3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure system persistence dhcp-server
Tree	dhcp-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system persistence dhcp-server description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	configure system persistence dhcp-server location <i>keyword</i>
Tree	location
Options	cf1, cf2, cf3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nat-port-forwarding

Synopsis	Enter the nat-port-forwarding context
Context	configure system persistence nat-port-forwarding
Tree	nat-port-forwarding
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

description *description*

Synopsis	Text description
Context	configure system persistence nat-port-forwarding description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

location *keyword*

Synopsis	CPM flash card where the information is stored
Context	configure system persistence nat-port-forwarding location <i>keyword</i>
Tree	location
Options	cf1, cf2, cf3
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

ptp

Synopsis	Enter the ptp context
Context	configure system ptp
Tree	ptp
Description	Commands in this context configure PTP command options based on IEEE 1588-2008, Precision Time Protocol. The context is only supported on control assemblies that support 1588.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of PTP
Context	configure system ptp admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

alternate-profile [[name](#)] *named-item-64*

Synopsis	Enter the alternate-profile list instance
Context	configure system ptp alternate-profile <i>named-item-64</i>
Tree	alternate-profile
Description	<p>Commands in this context create an alternate profile configuration for use in PTP messaging.</p> <p>The alternate profile can be used at the edge of a network to provide PTP time or frequency distribution outward to external PTP clocks.</p> <p>The alternate profile cannot be deleted if it is configured as the profile under a PTP port.</p>
Max. instances	6
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[name] *named-item-64*

Synopsis	Alternate profile name
Context	configure system ptp alternate-profile <i>named-item-64</i>
Tree	alternate-profile
Description	<p>This command configures an alternate profile name.</p> <p>The strings "Primary" and "primary" cannot be used for the alternate-profile name.</p>
String length	1 to 64
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the alternate PTP profile
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Context	configure system ptp alternate-profile <i>named-item-64</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

domain *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Alternate profile PTP domain number
Context	configure system ptp alternate-profile <i>named-item-64</i> domain <i>number</i>
Tree	domain
Range	0 to 255
Default	24
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

log-announce-interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP announce message interval in log form
Context	configure system ptp alternate-profile <i>named-item-64</i> log-announce-interval <i>number</i>
Tree	log-announce-interval
Description	<p>This command configures the announce message interval used for multicast messages within the alternate profile.</p> <p>For multicast messages used on PTP Ethernet ports, this command configures the message interval used for announce messages transmitted by the local node.</p> <p>This value has no impact on the interval used for the BTCA, which is controlled by the value defined for the primary profile.</p>
Range	-3 to 4

Default	-3
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Standard based profile used within an alternate profile
Context	configure system ptp alternate-profile <i>named-item-64</i> profile <i>keyword</i>
Tree	profile
Description	<p>This command specifies the standard based profile that is used as the basis for the alternate profile.</p> <p>This setting controls the contents of PTP messages sent on ports and peers using this alternate profile.</p>
Options	g8265dot1-2010 – ITU-T G.8265.1 specification ieee1588-2008 – 2008 version of IEEE 1588 standard g8275dot1-2014 – 2014 version of ITU-T G.8275.1 specification g8275dot2-2016 – 2016 version of ITU-T G.8275.2 specification iec-61850-9-3-2016 – 2016 version of IEC/IEEE 61850-9-3 standard c37dot238-2017 – 2017 version of C37.238 specification
Default	g8275dot1-2014
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

announce-receipt-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Expired intervals count before timeout event declared
Context	configure system ptp announce-receipt-timeout <i>number</i>
Tree	announce-receipt-timeout
Description	This command configures the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event.

Range	2 to 10
Default	3
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

clock-type *keyword*

- **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.
- **WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Clock type
Context	configure system ptp clock-type <i>keyword</i>
Tree	clock-type
Options	slave-only, master-only, boundary
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

domain *number*

- **WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP domain
Context	configure system ptp domain <i>number</i>
Tree	domain
Description	<p>This command configures the PTP domain. The default and valid range of the domain depend on the configured PTP profile.</p> <ul style="list-style-type: none">• IEEE 1588-2008 - domain range of 0 to 255 (default 0)• G.8265.1 - domain range of 0 to 255 (default 4)• G.8275.1 - domain range of 24 to 43 (default 24)• G.8275.2 - domain range of 0 to 255 (default 44)• IEC/IEEE 61850-9-3 - domain range of 0 to 255 (default 0)

- C37.238 - domain range of 0 to 255 (default 254)

Range	0 to 255
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

initial-time-inaccuracy *number*

Synopsis	Total time inaccuracy from grandmaster to local clock
Context	configure system ptp initial-time-inaccuracy <i>number</i>
Tree	initial-time-inaccuracy
Description	<p>This command configures the time inaccuracy value, representing the total time inaccuracy from the grandmaster clock to the parent clock. This value is added to the mandatory IEEE_C37_238 TLV.</p> <p>This command is applicable only when the alternate profile is configured as c37dot238-2017.</p>
Range	0 to 100000000
Units	nanoseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

local-priority *number*

Synopsis	PTP clock local priority
Context	configure system ptp local-priority <i>number</i>
Tree	local-priority
Description	<p>This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority command option associated with the local clock (ptp context). See the ITU-T G.8275.1 or G.8275.2 standard for detailed information.</p>
Range	1 to 255
Default	128
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

log-announce-interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Announce message interval in log form
Context	configure system ptp log-announce-interval <i>number</i>
Tree	log-announce-interval
Description	<p>This command configures the Announce message interval used for both unicast and multicast messages.</p> <p>For unicast messages, the Announce message interval is requested during unicast negotiation to any peer. This controls the Announce message rate sent from remote peers to the local node. It does not affect the announce message rate that may be sent from the local node to remote peers. Remote peers may request an Announce message rate within the acceptable grant range.</p> <p>For multicast messages used on PTP Ethernet ports, this command specifies the message interval used for Announce messages transmitted by the local node.</p> <p>This value also defines the interval between executions of the BTCA within the node.</p> <p>To minimize BTCA-driven reconfigurations, IEEE recommends that the Announce interval should be consistent across the entire 1588 network.</p>
Range	-3 to 4
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

max-steps-removed *number*

Synopsis	Threshold for steps removed in Announce messages
Context	configure system ptp max-steps-removed <i>number</i>
Tree	max-steps-removed
Description	<p>This command configures a maximum limit for the stepsRemoved field in PTP Announce messages. When a user configures a value for the maximum steps removed, the PTP clock disqualifies and drops any incoming Announce messages where the stepsRemoved field in the PTP header is equal to or greater than the configured maximum steps removed value.</p> <p>This command effectively limits the maximum number of hops a potential parent clock can be from the GM clock. This command is crucial for maintaining the integrity and performance of the PTP synchronized network by preventing clocks that are too far removed from the GM from being selected as parent clocks.</p>
Range	1 to 255

Default	255
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

network-type *keyword*

Synopsis	PTP network type
Context	configure system ptp network-type <i>keyword</i>
Tree	network-type
Description	<p>This command configures the codeset to be used for the encoding of QL values into PTP clockClass values and vice versa when the profile is configured for G.8265.1 or G.8275.2.</p> <p>This setting only applies to the range of values observed in the clockClass values transmitted out of the node in Announce messages. The router supports the reception of any valid value in Table 1/G.8265.1 and Table2/G.8275.2.</p>
Options	sonet, sdh
Default	sdh
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

port [[port-id](#)] *reference*

Synopsis	Enter the port list instance
Context	configure system ptp port <i>reference</i>
Tree	port
Description	<p>Commands in this context configure PTP over Ethernet on the physical port. The PTP process transmits and receives PTP messages through the port using Ethernet encapsulation (as opposed to UDP/IPv4 encapsulation).</p> <p>Frames are transmitted with no VLAN tags, even if the port is configured for dot1q or qinq modes for encap-type. The received frames from the external PTP clock must also be untagged.</p> <p>Two reserved multicast addresses are allocated for PTP messages (see Annex F IEEE Std 1588-2008). Either address can be configured for the PTP messages sent through the port.</p> <p>A PTP port cannot be created if the PTP profile is configured for G.8265.1.</p> <p>If the port supports 1588 port-based timestamping, Synchronous Ethernet must be enabled on the MDA when PTP over Ethernet is enabled.</p> <p>De-provisioning of the card or MDA containing the specified port is not permitted while the port is configured within PTP.</p>

Changing the encapsulation or the port type of the Ethernet port is not permitted when PTP Ethernet Multicast operation is configured on the port.

To allocate an Ethernet satellite client port as a PTP port, the Ethernet satellite must first be enabled for the transparent clock function. For more information, see the **configure satellite ethernet-satellite ptp-tc** command.

The SyncE/1588 ports of the CPM and CCMs can be specified as PTP ports. These use the 'A/3' and 'B/3' designation and both must be specified as two PTP ports if both are used. The active CPM sends and receives messages on both ports if they are specified and enabled.

Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[port-id] *reference*

Synopsis	Ethernet PTP port ID
Context	configure system ptp port <i>reference</i>
Tree	port
Reference	configure port <i>port</i>
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

address *mac-address*

Synopsis	Destination MAC address of the transmitted PTP messages
Context	configure system ptp port <i>reference</i> address <i>mac-address</i>
Tree	address
Description	<p>This command specifies the destination MAC address of the transmitted PTP messages. IEEE Std 1588-2008 Annex F defines two reserved addresses for 1588 messages, which include:</p> <ul style="list-style-type: none"> • 01-1B-19-00-00-00 — all except the peer delay mechanism messages • 01-80-C2-00-00-0E — peer delay mechanism messages <p>Both addresses are supported for reception, independent of the address configured by this command.</p>
Default	01:1B:19:00:00:00
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the PTP port
Context	configure system ptp port <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

alternate-profile *reference*

Synopsis	Alternate profile for the PTP port
Context	configure system ptp port <i>reference</i> alternate-profile <i>reference</i>
Tree	alternate-profile
Description	This command creates the alternate profile that is used in communications with the port or peer. If no alternate profile is specified, the primary profile is used.
Reference	configure system ptp alternate-profile <i>named-item-64</i>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

delay-resp-receipt-timeout *number*

Synopsis	Number of Delay_Resp intervals before PTSF-LOTM
Context	configure system ptp port <i>reference</i> delay-resp-receipt-timeout <i>number</i>
Tree	delay-resp-receipt-timeout
Description	<p>This command configures the number of Delay_Resp message intervals that can pass without receiving a message from a neighbor before the router declares the PTSF-LOTM condition for that neighbor. A neighbor in this condition is excluded from the BTCA. The condition clears when Delay_Resp message reception resumes.</p> <p>This command applies only to PTP profiles that support the PTSF-LOTM condition.</p>
Range	3 to 65535
Introduced	26.10.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

local-priority *number*

Synopsis	PTP port local priority
Context	configure system ptp port <i>reference</i> local-priority <i>number</i>
Tree	local-priority
Description	<p>This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (ptp port context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

log-delay-interval *number*

Synopsis	Minimum interval for Delay_Req messages in log form
Context	configure system ptp port <i>reference</i> log-delay-interval <i>number</i>
Tree	log-delay-interval
Description	<p>This command configures the minimum interval used for multicast Delay_Req messages for the port. For ports in a slave state, the interval is used, unless the parent port indicates a longer interval. For a port in master state, the interval is advertised to external slave ports as the minimum acceptable interval for Delay_Req messages from the slave ports.</p> <p>The router supports the 1588 standard requirement for a port in slave state to check the logMessageInterval field of received multicast Delay_Resp messages. If the value of the logMessageInterval field of the messages is greater than the value configured locally for the generation of Delay_Req messages, the slave must use the longer interval for the generation of Delay_Req messages.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

log-sync-interval *number*

Synopsis	Interval for transmission of Sync messages in log form
Context	configure system ptp port <i>reference</i> log-sync-interval <i>number</i>
Tree	log-sync-interval
Description	<p>This command configures the interval used for Sync messages transmitted by the local node when the port is in master state.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

master-only *boolean*

Synopsis	Restrict the local port to master state
Context	configure system ptp port <i>reference</i> master-only <i>boolean</i>
Tree	master-only
Description	<p>When configured to true, the local port is restricted to master state only, ensuring that the system does not obtain synchronization from attached external devices.</p> <p>This command is supported only when the PTP profile is set for G.8275.1 or G.8275.2.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

monitor-receiver *boolean*

Synopsis	Enable the PTP port as a monitor-receiver
Context	configure system ptp port <i>reference</i> monitor-receiver <i>boolean</i>
Tree	monitor-receiver
Description	<p>When configured to true, the router enables the PTP port as a monitorReceiver for PTP. When not in TimeReceiver mode, the PTP port runs a time-recovery engine for PTP monitoring. This object is supported only when the PTP profile is set to G.8275.1 or G.8275.2.</p> <p>When configured to false, monitoring is disabled.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

monitor-sender *boolean*

Synopsis	Enable the PTP port as a monitor-sender
Context	configure system ptp port <i>reference</i> monitor-sender <i>boolean</i>
Tree	monitor-sender
Description	<p>When configured to true, the router enables the PTP port as a monitorSender for PTP. When not in TimeTransmitter mode, the PTP port sends Announce, Sync, and Delay_Resp messages with the alternateMasterFlag set to TRUE for PTP monitoring at the remote clock. This object is supported only when the PTP profile is set to G.8275.1 or G.8275.2.</p> <p>When configured to false, monitoring is disabled.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

not-master *boolean*

Synopsis	Block PTP port from entering the timeTransmitter state
Context	configure system ptp port <i>reference</i> not-master <i>boolean</i>
Tree	not-master
Description	When configured to true , the router blocks the port from entering the timeTransmitter state.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sync-receipt-timeout *number*

Synopsis	Number of Sync intervals before PTSF-LOTM
Context	configure system ptp port <i>reference</i> sync-receipt-timeout <i>number</i>
Tree	sync-receipt-timeout
Description	<p>This command configures the number of Sync message intervals, including the Follow_Up messages of a two-step clock, that can pass without receiving a message from a neighbor before the router declares the PTSF-LOTM condition for that neighbor. A neighbor in this condition is excluded from the BTCA. The condition clears when Sync message reception resumes.</p> <p>This command applies only to PTP profiles that support the PTSF-LOTM condition.</p>
Range	3 to 65535

Introduced	26.10.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

priority1 *number*

Synopsis	Priority1 of the local clock
Context	configure system ptp priority1 <i>number</i>
Tree	priority1
Description	<p>This command configures the priority1 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008.</p> <p>This value is used by the Best Master Clock Algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.</p>
Range	0 to 255
Default	128
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

priority2 *number*

Synopsis	Priority2 of the local clock
Context	configure system ptp priority2 <i>number</i>
Tree	priority2
Description	<p>This command configures the priority2 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008, G.8275.1, or G.8275.2.</p> <p>This value is used by the Best Master Clock algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.</p>
Range	0 to 255
Default	128
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PTP profile
Context	configure system ptp profile <i>keyword</i>
Tree	profile
Description	<p>This command configures the profile to be used for the internal PTP clock. It defines the Best timeTransmitter Clock Algorithm (BTCA) behavior.</p> <p>Profile changes may affect the settings of other configuration elements, such as the clock type and default settings for the delay interval, announce interval, and the Sync interval.</p> <p>The following clock types are supported for the indicated profiles:</p> <ul style="list-style-type: none"> • G.8265.1: slave only, master only • IEEE 1588 2008: slave only, master only, boundary • G.8275.1: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver) • G.8275.2: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver) • IEC/IEEE 61850-9-3: slave only, master only, boundary • C37.238: slave only, master only, boundary
Options	g8265dot1-2010 – ITU-T G.8265.1 specification ieee1588-2008 – 2008 version of IEEE 1588 standard g8275dot1-2014 – 2014 version of ITU-T G.8275.1 specification g8275dot2-2016 – 2016 version of ITU-T G.8275.2 specification iec-61850-9-3-2016 – 2016 version of IEC/IEEE 61850-9-3 standard c37dot238-2017 – 2017 version of C37.238 specification
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

ptsf

Synopsis	Enter the ptsf context
Context	configure system ptp ptsf
Tree	ptsf
Description	Commands in this context configure the attributes of Packet Timing Signal Fail (PTSF).
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

monitor-ptsf-unusable

Synopsis	Enter the monitor-ptsf-unusable context
Context	configure system ptp ptsf monitor-ptsf-unusable
Tree	monitor-ptsf-unusable
Description	<p>Commands in this context configure monitoring of neighbor clocks for the PTSF-unusable state (condition) when the profile is set to g8275dot1-2014.</p> <p>When administratively enabled, the local clock monitors the noise level of PTP event messages between external neighbor PTP ports and the local clock. If it detects a high variation in the network path between the external neighbor port and the local port, it considers the neighbor port unusable. Announce messages from the neighbor are discarded and excluded from the BTCA and the port cannot be selected as the parent clock. The unusable condition must be manually cleared.</p> <p>When administratively disabled, the monitor PTSF function of the PTP clock clears PTSF-unusable states from all neighbor PTP ports. If no PTP messages are received from a neighbor for 15 minutes, the neighbor information is purged and the PTSF-unusable state is cleared.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of PTSF unusable monitoring
Context	configure system ptp ptsf monitor-ptsf-unusable admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

router [[router-instance](#)] *string*

Synopsis	Enter the router list instance
Context	configure system ptp router <i>string</i>
Tree	router
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[router-instance] string

Synopsis	Router name or VPRN service name
Context	configure system ptp router <i>string</i>
Tree	router
MD-CLI default	Base
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state keyword

Synopsis	Administrative state of PTP on the router instance
Context	configure system ptp router <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

peer [ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	Enter the peer list instance
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Description	Commands in this context configure a remote PTP peer.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

[ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address of the remote PTP peer
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer

Description	This command specifies the IP address of the remote PTP peer.
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

admin-state *keyword*

Synopsis	Administrative state of the PTP peer
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

delay-resp-receipt-timeout *number*

Synopsis	Number of Delay_Resp intervals before PTSF-LOTM
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) delay-resp-receipt-timeout <i>number</i>
Tree	delay-resp-receipt-timeout
Description	<p>This command configures the number of Delay_Resp message intervals that can pass without receiving a message from this peer before the router declares the PTSF-LOTM condition for the peer. A peer in this condition is excluded from the BTCA. The condition clears when Delay_Resp message reception resumes.</p> <p>This command applies only to PTP profiles that support the PTSF-LOTM condition.</p>
Range	3 to 65535
Introduced	26.10.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

local-priority *number*

Synopsis	PTP peer local priority
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-priority <i>number</i>
Tree	local-priority

Description	<p>This command configures the local priority for the peer, which is used to choose between PTP timeTransmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is configured for G.8265.1, G.8275.1, or G.8275.2 and is ignored for any other profile.</p> <p>For G.8265.1, this command configures the priority used to choose between time Transmitter clocks with the same quality (see G.8265.1 for more details).</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (ptp router peer context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

log-sync-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP peer interval for Sync messages in log form
Context	configure system ptp router <i>string peer (ipv4-address-no-zone ipv6-address-no-zone) log-sync-interval number</i>
Tree	log-sync-interval
Description	<p>This command configures the message interval used for Sync and Delay_Resp messages that are requested during unicast negotiation to the peer. The setting controls messages sent from remote peers to the local node but the packet rate from the local node to remote peers is not affected. Remote peers may request a packet rate within the acceptable range.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

monitor-receiver *boolean*

Synopsis	Enable the PTP peer as a monitor-receiver
Context	configure system ptp router <i>string peer (ipv4-address-no-zone ipv6-address-no-zone) monitor-receiver boolean</i>

Tree	monitor-receiver
Description	<p>When configured to true, the router enables the PTP peer as a monitorReceiver for PTP. When not in TimeReceiver mode, the PTP port runs a time-recovery engine for PTP monitoring. This object is only supported when the PTP profile is set to G.8275.1 or G.8275.2.</p> <p>When configured to false, monitoring is disabled.</p>
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

not-master *boolean*

Synopsis	Block PTP port from entering the timeTransmitter state
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) not-master <i>boolean</i>
Tree	not-master
Description	When configured to true , the router blocks the port associated with the peer from entering the timeTransmitter state.
Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

sync-receipt-timeout *number*

Synopsis	Number of Sync intervals before PTSF-LOTM
Context	configure system ptp router <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync-receipt-timeout <i>number</i>
Tree	sync-receipt-timeout
Description	<p>This command configures the number of Sync message intervals, including the Follow_Up messages of a two-step clock, that can pass without receiving a message from this peer before the router declares the PTSF-LOTM condition for the peer. A peer in this condition is excluded from the BTCA. The condition clears when Sync message reception resumes.</p> <p>This command applies only to PTP profiles that support the PTSF-LOTM condition.</p>
Range	3 to 65535
Introduced	26.10.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

peer-limit *number*

Synopsis	Number of discovered peers allowed for routing instance
Context	configure system ptp router <i>string</i> peer-limit <i>number</i>
Tree	peer-limit
Description	<p>This command specifies the maximum number of discovered peers permitted within the routing instance. This ensures that a routing instance does not consume all the possible discovered peers and prevents the routing instance from blocking discovered peers in other routing instances.</p> <p>The sum of all peer limit values for all routing instances cannot exceed the maximum number of discovered peers supported by the system.</p>
Range	0 to 1600
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

time-inaccuracy *number*

Synopsis	Time inaccuracy value override
Context	configure system ptp time-inaccuracy <i>number</i>
Tree	time-inaccuracy
Description	<p>This command overrides the system-generated time inaccuracy value for the PTP clock with a specified value. The clock's time inaccuracy value is added to the total time inaccuracy value in IEEE_C37_238 TLVs sent to downstream clocks in Announce messages.</p> <p>This command is applicable only for boundary clocks and only when the profile is configured as c37dot238-2017.</p>
Range	0 to 10000000
Units	nanoseconds
Default	0
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tx-path-trace *boolean*

Synopsis	Include PATH TRACE TLV in Announce messages
Context	configure system ptp tx-path-trace <i>boolean</i>
Tree	tx-path-trace

Default	false
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

tx-while-sync-uncertain *boolean*

Synopsis	Send Announce messages while clock is unsynchronized
Context	configure system ptp tx-while-sync-uncertain <i>boolean</i>
Tree	tx-while-sync-uncertain
Description	<p>When configured to true, the local PTP clock transmits Announce messages to downstream clocks to indicate it has not yet stabilized on the recovered synchronization source (upstream clocks or GM clock). While the PTP clock is unsynchronized, the Sync Uncertain state is true.</p> <p>When configured to false, the local PTP clock does not send Announce messages to downstream clocks to indicate it is not synchronized to a valid timing source. If the Sync Uncertain state of the clock is true while this command is configured to false, unicast negotiation grant requests are not granted and current grants are canceled.</p>
Default	true
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

within-holdover-spec-timer *number*

Synopsis	Duration for local clock to specify the holdover state
Context	configure system ptp within-holdover-spec-timer <i>number</i>
Tree	within-holdover-spec-timer
Description	This command configures the duration for which the local clock sets its clock class to a value that indicates it is in holdover, within specification, following the loss of the primary reference time source.
Range	0 to 3600
Units	seconds
Default	600
Introduced	26.3.R1
Platforms	7705 SAR-10x, 7705 SAR-Hx, 7705 SAR-Mx

script-control

Synopsis	Enter the script-control context
Context	configure system script-control
Tree	script-control
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script [[script-name](#)] *named-item* [owner](#) *named-item*

Synopsis	Enter the script list instance
Context	configure system script-control script <i>named-item</i> owner <i>named-item</i>
Tree	script
Max. instances	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[script-name] *named-item*

Synopsis	Script name
Context	configure system script-control script <i>named-item</i> owner <i>named-item</i>
Tree	script
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *named-item*

Synopsis	Script owner
Context	configure system script-control script <i>named-item</i> owner <i>named-item</i>
Tree	script
Description	This command configures the owner to be associated with the script. The owner is optional and "TiMOS CLI" is used if an owner is not specified.

The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The **configure system security cli-script authorization x cli-user** command determines the user context against which commands in the scripts are authorized.

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	TIMOS CLI
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the script
Context	configure system script-control script <i>named-item</i> owner <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system script-control script <i>named-item</i> owner <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

location *string-not-all-spaces*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script location
Context	configure system script-control script <i>named-item</i> owner <i>named-item</i> location <i>string-not-all-spaces</i>
Tree	location
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script-policy [**policy-name**] *named-item* **owner** *named-item*

Synopsis	Enter the script-policy list instance
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Tree	script-policy
Max. instances	1500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[**policy-name**] *named-item*

Synopsis	Script policy name
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Tree	script-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *named-item*

Synopsis	Script policy owner
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i>
Tree	script-policy
Description	<p>This command configures the owner to be associated with the script policy. The owner is optional and "TiMOS CLI" is used if an owner is not specified.</p> <p>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The configure system security cli-script authorization x cli-user command determines the user context against which commands in the scripts are authorized.</p>
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
MD-CLI default	TiMOS CLI
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the script policy
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

expire-time (*number* | *keyword*)

Synopsis	Maximum amount of time to keep a run history status
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> expire-time (<i>number</i> <i>keyword</i>)
Tree	expire-time
Range	0 to 21474836

Units	seconds
Options	forever
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lifetime (*number* | *keyword*)

Synopsis	Maximum amount of time the script may run
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> lifetime (<i>number</i> <i>keyword</i>)
Tree	lifetime
Range	0 to 21474836
Units	seconds
Options	forever
Default	3600
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lock-override *boolean*

Synopsis	Allow EHS/CRON script to break database explicit lock
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> lock-override <i>boolean</i>
Tree	lock-override
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-completed *number*

Synopsis	Maximum number of script history status entries kept
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> max-completed <i>number</i>

Tree	max-completed
Range	1 to 1500
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python-lifetime *number*

Synopsis	Maximum time the Python application can run
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> python-lifetime <i>number</i>
Tree	python-lifetime
Range	30 to 86400
Units	seconds
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python-script

Synopsis	Enter the python-script context
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> python-script
Tree	python-script
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Python application name
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Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> python-script name <i>reference</i>
Tree	name
Reference	configure python python-script <i>named-item</i>
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

results *string-not-all-spaces*

Synopsis	Location to receive CLI output of a script run
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> results <i>string-not-all-spaces</i>
Tree	results
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

script

Synopsis	Enter the script context
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> script
Tree	script
Notes	The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *named-item*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script name
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> script name <i>named-item</i>

Tree	name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *named-item*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script owner
Context	configure system script-control script-policy <i>named-item</i> owner <i>named-item</i> script owner <i>named-item</i>
Tree	owner
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security

Synopsis	Enter the security context
Context	configure system security
Tree	security
Description	<div>Commands in this context configure the central security settings, such as DDoS protection, users, authorization profiles, and certificates.</div> <div>Access to these commands should be restricted to highly trusted users and device administrators.</div>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aaa

Synopsis	Enter the aaa context
Context	configure system security aaa

Tree	aaa
Description	Commands in this context configure AAA at the system level.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-session-group [[cli-session-group-name](#)] *named-item*

Synopsis	Enter the cli-session-group list instance
Context	configure system security aaa cli-session-group <i>named-item</i>
Tree	cli-session-group
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cli-session-group-name] *named-item*

Synopsis	CLI session group name
Context	configure system security aaa cli-session-group <i>named-item</i>
Tree	cli-session-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'cli-session-group-name' must not contain spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

combined-max-sessions *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	configure system security aaa cli-session-group <i>named-item</i> combined-max-sessions <i>number</i>
Tree	combined-max-sessions
Range	0 to 50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security aaa cli-session-group <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh-max-sessions *number*

Synopsis	Maximum number of concurrent SSH sessions
Context	configure system security aaa cli-session-group <i>named-item</i> ssh-max-sessions <i>number</i>
Tree	ssh-max-sessions
Range	0 to 50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-max-sessions *number*

Synopsis	Maximum number of concurrent Telnet sessions
Context	configure system security aaa cli-session-group <i>named-item</i> telnet-max-sessions <i>number</i>
Tree	telnet-max-sessions
Range	0 to 50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

health-check (*number* | *keyword*)

Synopsis	Polling interval of LDAP, RADIUS, and TACACS+ servers
Context	configure system security aaa health-check (<i>number</i> <i>keyword</i>)
Tree	health-check
Description	This command configures the polling interval for health check monitoring of the LDAP, RADIUS, and TACACS+ servers. The servers send requests at regular intervals. If a

response is not received, the operational status of the server is changed to down. The operational status is changed to up when responses are received.

When RADIUS over TLS is configured, Status-Server packets are sent at 30-second intervals as specified in RFC 3539, regardless of whether health checks are enabled.

When this command is configured to **none**, health check monitoring of LDAP, RADIUS, and TACACS+ servers is disabled and the operational status for the server is up if a response to the last request was received.

Range	6 to 1500
Units	seconds
Options	none
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-profiles

Synopsis	Enter the local-profiles context
Context	configure system security aaa local-profiles
Tree	local-profiles
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile [[user-profile-name](#)] *named-item*

Synopsis	Enter the profile list instance
Context	configure system security aaa local-profiles profile <i>named-item</i>
Tree	profile
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[user-profile-name](#)] *named-item*

Synopsis	User profile name
Context	configure system security aaa local-profiles profile <i>named-item</i>
Tree	profile

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'user-profile-name' must not contain spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-session-group *reference*

Synopsis	CLI session group to which the profile belongs
Context	configure system security aaa local-profiles profile <i>named-item</i> cli-session-group <i>reference</i>
Tree	cli-session-group
Reference	configure system security aaa cli-session-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

combined-max-sessions *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	configure system security aaa local-profiles profile <i>named-item</i> combined-max-sessions <i>number</i>
Tree	combined-max-sessions
Range	0 to 50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Action for non-matching entry
Context	configure system security aaa local-profiles profile <i>named-item</i> default-action <i>keyword</i>
Tree	default-action
Description	<p>This command specifies the default action to be applied when no match conditions are met in the list of profile entry match commands. It does not apply to other parts of the profile such as grpc rpc-authorization or netconf base-op-authorization.</p> <p>When a user is a member of multiple profiles, profiles are evaluated in the order that they are configured. Evaluation stops if there is a match, or when the default action</p>

of the profile is **deny-all**, **permit-all**, or **read-only-all**. When the profile default action is none and if no match conditions are met in the profile, the next profile is evaluated. When the default action of the last profile is none and no explicit match is found, the command is denied.

Options	deny-all – Deny access to all commands permit-all – Allow access to all commands none – No action; evaluate the next profile read-only-all – Allow read-only access to all commands
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry *[entry-id] number*

Synopsis	Enter the entry list instance
Context	configure system security aaa local-profiles profile <i>named-item</i> entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	User profile entry ID
Context	configure system security aaa local-profiles profile <i>named-item</i> entry <i>number</i>
Tree	entry
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action when a command matches the entry
Context	configure system security aaa local-profiles profile <i>named-item</i> entry <i>number</i> action <i>keyword</i>
Tree	action
Description	This command configures the action associated with the profile entry.

Options	deny – Keyword permit – Keyword none – No action; evaluate the next entry read-only – Keyword
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security aaa local-profiles profile <i>named-item</i> entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match *display-string*

Synopsis	Command to match the entry
Context	configure system security aaa local-profiles profile <i>named-item</i> entry <i>number</i> match display-string
Tree	match
String length	1 to 255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc

Synopsis	Enter the grpc context
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc
Tree	grpc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

custom-proto *keyword*

Synopsis	Allow custom-proto service RPCs.
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc custom-proto <i>keyword</i>
Tree	custom-proto
Options	permit, deny
Default	deny permit
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

rpc-authorization

Synopsis	Enter the rpc-authorization context
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization
Tree	rpc-authorization
Description	Commands in this context control the authorization of each RPC in gRPC interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnmi-capabilities *keyword*

Synopsis	gNMI Capabilities RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnmi-capabilities <i>keyword</i>
Tree	gnmi-capabilities
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnmi-get *keyword*

Synopsis	gNMI Get RPC authorization
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Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnmi-get <i>keyword</i>
Tree	gnmi-get
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnmi-set *keyword*

Synopsis	gNMI Set RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnmi-set <i>keyword</i>
Tree	gnmi-set
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnmi-subscribe *keyword*

Synopsis	gNMI Subscribe RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnmi-subscribe <i>keyword</i>
Tree	gnmi-subscribe
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-cert-mgmt-cangenerate *keyword*

Synopsis	gNOI CanGenerateCSR RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-cert-mgmt-cangenerate <i>keyword</i>
Tree	gnoi-cert-mgmt-cangenerate

Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-cert-mgmt-getcert *keyword*

Synopsis	gNOI GetCertificates RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-cert-mgmt-getcert <i>keyword</i>
Tree	gnoi-cert-mgmt-getcert
Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-cert-mgmt-install *keyword*

Synopsis	gNOI Install RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-cert-mgmt-install <i>keyword</i>
Tree	gnoi-cert-mgmt-install
Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-cert-mgmt-revoke *keyword*

Synopsis	gNOI RevokeCertificates RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-cert-mgmt-revoke <i>keyword</i>
Tree	gnoi-cert-mgmt-revoke

Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-cert-mgmt-rotate *keyword*

Synopsis	gNOI Rotate RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-cert-mgmt-rotate <i>keyword</i>
Tree	gnoi-cert-mgmt-rotate
Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-file-get *keyword*

Synopsis	gNOI File Get RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-file-get <i>keyword</i>
Tree	gnoi-file-get
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-file-put *keyword*

Synopsis	gNOI File Put RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-file-put <i>keyword</i>
Tree	gnoi-file-put
Options	permit, deny

Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-file-remove *keyword*

Synopsis	gNOI File Remove RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-file-remove <i>keyword</i>
Tree	gnoi-file-remove
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-file-stat *keyword*

Synopsis	gNOI File Stat RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-file-stat <i>keyword</i>
Tree	gnoi-file-stat
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-file-transfertoremove *keyword*

Synopsis	gNOI File TransferToRemote RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-file-transfertoremove <i>keyword</i>
Tree	gnoi-file-transfertoremove
Options	permit, deny
Default	permit
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

gnoi-system-cancelreboot *keyword*

Synopsis gNOI System CancelReboot RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *named-item* [grpc](#) [rpc-authorization](#) [gnoi-system-cancelreboot](#) *keyword*

Tree [gnoi-system-cancelreboot](#)

Options permit, deny

Default deny
permit

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gnoi-system-ping *keyword*

Synopsis gNOI System Ping RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *named-item* [grpc](#) [rpc-authorization](#) [gnoi-system-ping](#) *keyword*

Tree [gnoi-system-ping](#)

Options permit, deny

Default permit

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gnoi-system-reboot *keyword*

Synopsis gNOI System Reboot RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *named-item* [grpc](#) [rpc-authorization](#) [gnoi-system-reboot](#) *keyword*

Tree [gnoi-system-reboot](#)

Options permit, deny

Default deny
permit

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

gnoi-system-rebootstatus *keyword*

Synopsis	gNOI System RebootStatus RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-system-rebootstatus <i>keyword</i>
Tree	gnoi-system-rebootstatus
Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-system-setpackage *keyword*

Synopsis	gNOI System SetPackage RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-system-setpackage <i>keyword</i>
Tree	gnoi-system-setpackage
Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-system-switchcontrolprocessor *keyword*

Synopsis	gNOI System SwitchControlProcessor RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-system-switchcontrolprocessor <i>keyword</i>
Tree	gnoi-system-switchcontrolprocessor
Options	permit, deny
Default	deny permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-system-time *keyword*

Synopsis	gNOI System Time RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-system-time <i>keyword</i>
Tree	gnoi-system-time
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gnoi-system-traceroute *keyword*

Synopsis	gNOI System Traceroute RPC authorization
Context	configure system security aaa local-profiles profile <i>named-item</i> grpc rpc-authorization gnoi-system-traceroute <i>keyword</i>
Tree	gnoi-system-traceroute
Options	permit, deny
Default	permit
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf

Synopsis	Enter the netconf context
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf
Tree	netconf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

base-op-authorization

Synopsis	Enter the base-op-authorization context
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization
Tree	base-op-authorization

Description	Commands in this context configure the permission to use NETCONF operations at the base operation level for the specified profile. The NETCONF operations are authorized by default in the built-in system-generated administrative profile.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *boolean*

Synopsis	Allow the NETCONF <action> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization action <i>boolean</i>
Tree	action
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cancel-commit *boolean*

Synopsis	Allow the NETCONF <cancel-commit> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization cancel-commit <i>boolean</i>
Tree	cancel-commit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

close-session *boolean*

Synopsis	Allow the NETCONF <close-session> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization close-session <i>boolean</i>
Tree	close-session
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

commit *boolean*

Synopsis	Allow the NETCONF <commit> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization commit <i>boolean</i>
Tree	commit
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

copy-config *boolean*

Synopsis	Allow the NETCONF <copy-config> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization copy-config <i>boolean</i>
Tree	copy-config
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

create-subscription *boolean*

Synopsis	Allow the NETCONF <create-subscription> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization create-subscription <i>boolean</i>
Tree	create-subscription
Description	<p>When configured to true, the system enables the NETCONF create-subscription operation in the default profile.</p> <p>The configuration of this command is checked only at the time of the initial subscription. Configuration changes to this command do not cancel any in-progress subscriptions, and users who successfully subscribed initially continue to receive messages.</p> <p>The operation is enabled by default in the built-in system-generated administrative profile.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delete-config *boolean*

Synopsis	Allow the NETCONF <delete-config> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization delete-config <i>boolean</i>
Tree	delete-config
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

discard-changes *boolean*

Synopsis	Allow the NETCONF <discard-changes> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization discard-changes <i>boolean</i>
Tree	discard-changes
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

edit-config *boolean*

Synopsis	Allow the NETCONF <edit-config> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization edit-config <i>boolean</i>
Tree	edit-config
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

get *boolean*

Synopsis	Allow the NETCONF <get> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization get <i>boolean</i>
Tree	get

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

get-config *boolean*

Synopsis	Allow the NETCONF <get-config> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization get-config <i>boolean</i>
Tree	get-config
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

get-data *boolean*

Synopsis	Allow the NETCONF <get-data> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization get-data <i>boolean</i>
Tree	get-data
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

get-schema *boolean*

Synopsis	Allow the NETCONF <get-schema> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization get-schema <i>boolean</i>
Tree	get-schema
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kill-session *boolean*

Synopsis	Allow the NETCONF <kill-session> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization kill-session <i>boolean</i>
Tree	kill-session
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lock *boolean*

Synopsis	Allow the NETCONF <lock> and <unlock> RPCs
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization lock <i>boolean</i>
Tree	lock
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

validate *boolean*

Synopsis	Allow the NETCONF <validate> RPC
Context	configure system security aaa local-profiles profile <i>named-item</i> netconf base-op-authorization validate <i>boolean</i>
Tree	validate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh-max-sessions *number*

Synopsis	Maximum number of concurrent SSH sessions
Context	configure system security aaa local-profiles profile <i>named-item</i> ssh-max-sessions <i>number</i>
Tree	ssh-max-sessions

Range	0 to 50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-max-sessions *number*

Synopsis	Maximum number of concurrent Telnet sessions
Context	configure system security aaa local-profiles profile <i>named-item</i> telnet-max-sessions <i>number</i>
Tree	telnet-max-sessions
Range	0 to 50
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-interface

Synopsis	Enter the management-interface context
Context	configure system security aaa management-interface
Tree	management-interface
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc

Synopsis	Enter the grpc context
Context	configure system security aaa management-interface grpc
Tree	grpc
Description	Commands in this context configure gRPC TLS authentication options.
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

tls-authentication

Synopsis	Enter the tls-authentication context
Context	configure system security aaa management-interface grpc tls-authentication

Tree	tls-authentication
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of mTLS authentication
Context	configure system security aaa management-interface grpc tls-authentication admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

default-user *reference*

Synopsis	Local user to display with mTLS authentication
Context	configure system security aaa management-interface grpc tls-authentication default-user <i>reference</i>
Tree	default-user
Description	<p>This command configures the local user to display for gRPC sessions authenticated using mTLS when the username metadata is not sent during authentication. The configured local user is associated with every session that authenticates with mTLS without a username. This username is displayed in several places, for example, in the command output for the show users command, YANG state, log messages, and debug messages.</p> <p>The local user must be configured but is not used in mTLS authentication.</p>
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.7.R1
Platforms	7705 SAR Gen 2

md-cli

Synopsis	Enter the md-cli context
Context	configure system security aaa management-interface md-cli
Tree	md-cli

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

command-accounting-during-load *boolean*

Synopsis	Perform file command accounting for load or rollback
Context	configure system security aaa management-interface md-cli command-accounting-during-load <i>boolean</i>
Tree	command-accounting-during-load
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

output-authorization

Synopsis	Enter the output-authorization context
Context	configure system security aaa management-interface output-authorization
Tree	output-authorization
Description	<p>Commands in this context configure output authorization for model-driven interfaces and telemetry.</p> <p>When output authorization is performed, commands that display configuration or state output must authorize every element in the output. If a remote AAA server is configured, there may be delays in displaying output while the output is authorized. The remote AAA server may receive a large volume of authorization requests when substantial output displays are needed, such as for system configuration details.</p> <p>Input to edit the configuration is always authorized, and is not affected by commands in this context.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-interfaces *boolean*

Synopsis	Authorize output in model-driven interfaces
Context	configure system security aaa management-interface output-authorization md-interfaces <i>boolean</i>
Tree	md-interfaces
Description	<p>When configured to true, output is authorized for the following:</p> <ul style="list-style-type: none">• MD-CLI info and compare commands

- MD-CLI command completion of list key values
- NETCONF <get> and <get-config> RPC
- gRPC/gNMI Get RPCs

Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telemetry-data *boolean*

Synopsis	Authorize dial-in telemetry output
Context	configure system security aaa management-interface output-authorization telemetry-data <i>boolean</i>
Tree	telemetry-data
Description	When configured to true , the system authorizes telemetry data in gNMI Subscriber RPC responses for dial-in telemetry. When configured to false , telemetry data is not authorized.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telemetry-default-user *reference*

Synopsis	Local user for dial-out telemetry output authorization
Context	configure system security aaa management-interface output-authorization telemetry-default-user <i>reference</i>
Tree	telemetry-default-user
Description	This command specifies the local user for telemetry data authorization in gNMI Publish RPCs for dial-out telemetry. The administrator must configure the local user to ensure the subscription is operational.
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

remote-servers

Synopsis	Enter the remote-servers context
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Context	configure system security aaa remote-servers
Tree	remote-servers
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ldap

Synopsis	Enter the ldap context
Context	configure system security aaa remote-servers ldap
Tree	ldap
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LDAP operation protocol
Context	configure system security aaa remote-servers ldap admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

public-key-authentication *boolean*

Synopsis	Allow SSH public key authentication from LDAP server
Context	configure system security aaa remote-servers ldap public-key-authentication <i>boolean</i>
Tree	public-key-authentication
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
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Context	configure system security aaa remote-servers ldap route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security aaa remote-servers ldap server <i>number</i>
Tree	server
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	LDAP server ID
Context	configure system security aaa remote-servers ldap server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the address list instance
Context	configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	address
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	LDAP server address
Context	configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	Port number on which to contact the LDAP server
Context	configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port <i>number</i>
Tree	port
Range	1 to 65535
Default	389
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the LDAP server
Context	configure system security aaa remote-servers ldap server <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

bind-authentication

Synopsis Enter the **bind-authentication** context

Context **configure** [system security aaa remote-servers ldap server number bind-authentication](#)

Tree [bind-authentication](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

password *encrypted-leaf*

Synopsis Password used for authentication with the LDAP server

Context **configure** [system security aaa remote-servers ldap server number bind-authentication password encrypted-leaf](#)

Tree [password](#)

Description This command specifies the password used for authentication with the LDAP server in a protected format.

The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 254

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

root-dn *string-not-all-spaces*

Synopsis Root domain used for authentication with LDAP server

Context **configure** [system security aaa remote-servers ldap server number bind-authentication root-dn string-not-all-spaces](#)

Tree [root-dn](#)

String length 1 to 512

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

search

Synopsis	Enter the search context
Context	configure system security aaa remote-servers ldap server <i>number</i> search
Tree	search
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

base-dn *string-not-all-spaces*

Synopsis	LDAP server search base domain name
Context	configure system security aaa remote-servers ldap server <i>number</i> search base-dn <i>string-not-all-spaces</i>
Tree	base-dn
String length	1 to 512
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-name *named-item*

Synopsis	LDAP server name
Context	configure system security aaa remote-servers ldap server <i>number</i> server-name <i>named-item</i>
Tree	server-name
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-profile *reference*

Synopsis	TLS client profile used to encrypt the LDAP connection
Context	configure system security aaa remote-servers ldap server <i>number</i> tls-profile <i>reference</i>
Tree	tls-profile
Reference	configure system security tls client-tls-profile <i>named-item</i>

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-retry *number*

Synopsis	Number of attempts to retry contacting the LDAP server
Context	configure system security aaa remote-servers ldap server-retry <i>number</i>
Tree	server-retry
Range	1 to 10
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-timeout *number*

Synopsis	Timeout for a response from the LDAP server
Context	configure system security aaa remote-servers ldap server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-default-template *boolean*

Synopsis	Apply the default template to LDAP
Context	configure system security aaa remote-servers ldap use-default-template <i>boolean</i>
Tree	use-default-template
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius

Synopsis	Enter the radius context
Context	configure system security aaa remote-servers radius
Tree	radius
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access-algorithm *keyword*

Synopsis	Algorithm used to access the set of RADIUS servers
Context	configure system security aaa remote-servers radius access-algorithm keyword
Tree	access-algorithm
Options	direct, round-robin
Default	direct
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting *boolean*

Synopsis	Enable RADIUS command accounting
Context	configure system security aaa remote-servers radius accounting boolean
Tree	accounting
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-port *number*

Synopsis	Port number on RADIUS server for accounting requests
Context	configure system security aaa remote-servers radius accounting-port number
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the authentication server

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authorization *boolean*

Synopsis Enable RADIUS authorization

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [authorization](#) *boolean*

Tree [authorization](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interactive-authentication *boolean*

Synopsis Enable RADIUS interactive authentication

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [interactive-authentication](#) *boolean*

Tree [interactive-authentication](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

port *number*

Synopsis UDP port to communicate with the RADIUS server

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [radius](#) [port](#) *number*

Tree [port](#)

Range	1 to 65535
Default	1812
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	configure system security aaa remote-servers radius route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security aaa remote-servers radius server <i>number</i>
Tree	server
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	RADIUS server ID
Context	configure system security aaa remote-servers radius server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure system security aaa remote-servers radius server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authenticator *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	configure system security aaa remote-servers radius server <i>number</i> authenticator <i>keyword</i>
Tree	authenticator
Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Options	md5, sm3
Default	md5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secret *encrypted-leaf*

Synopsis	Secret key for RADIUS over UDP
Context	configure system security aaa remote-servers radius server <i>number</i> secret <i>encrypted-leaf</i>
Tree	secret
Description	This command specifies the secret key and enables RADIUS over UDP for the RADIUS server.

The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7505 SAR Gen 2 System Management Guide* for more information.

String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS profile for RADIUS over TLS
Context	configure system security aaa remote-servers radius server number tls-client-profile reference
Tree	tls-client-profile
Description	<p>This command specifies the TLS profile and enables RADIUS over TLS for the RADIUS server.</p> <p>When a TLS profile is assigned to a RADIUS server, the communication automatically switches from UDP to TCP, if a secret key is also configured. When a TLS profile is removed from a RADIUS server, the communication automatically switches from TCP to UDP, if a secret key is also configured. In both cases, the server is not recreated internally, so statistics are preserved.</p>
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-retry *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	configure system security aaa remote-servers radius server-retry <i>number</i>
Tree	server-retry
Range	1 to 10
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
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Context	configure system security aaa remote-servers radius server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 90
Units	seconds
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-default-template *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	configure system security aaa remote-servers radius use-default-template <i>boolean</i>
Tree	use-default-template
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tacplus

Synopsis	Enter the tacplus context
Context	configure system security aaa remote-servers tacplus
Tree	tacplus
Description	Commands in this context configure TACACS+ at the system level.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting

Synopsis	Enable the accounting context
Context	configure system security aaa remote-servers tacplus accounting
Tree	accounting
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

record-type *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	configure system security aaa remote-servers tacplus accounting record-type <i>keyword</i>
Tree	record-type
Options	start-stop, stop-only
Default	stop-only
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-control

Synopsis	Enter the admin-control context
Context	configure system security aaa remote-servers tacplus admin-control
Tree	admin-control
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tacplus-map-to-priv-lvl *number*

Synopsis	Interactive authentication from node to TACACS+ server
Context	configure system security aaa remote-servers tacplus admin-control tacplus-map-to-priv-lvl <i>number</i>
Tree	tacplus-map-to-priv-lvl
Range	0 to 15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the TACACS+ protocol
Context	configure system security aaa remote-servers tacplus admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authorization

Synopsis	Enable the authorization context
Context	configure system security aaa remote-servers tacplus authorization
Tree	authorization
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

request-format

Synopsis	Enter the request-format context
Context	configure system security aaa remote-servers tacplus authorization request-format
Tree	request-format
Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access-operation-cmd *keyword*

Synopsis	Access operations sent in authorization requests
Context	configure system security aaa remote-servers tacplus authorization request-format access-operation-cmd <i>keyword</i>
Tree	access-operation-cmd
Description	<p>This command sends an operation argument in authorization requests.</p> <p>In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.</p>
Options	delete
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-priv-lvl *boolean*

Synopsis	Allow privilege level mapping
Context	configure system security aaa remote-servers tacplus authorization use-priv-lvl <i>boolean</i>
Tree	use-priv-lvl
Description	<p>When configured to true, this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the priv-lvl-map) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except enable-admin). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except enable-admin).</p> <p>When configured to false, each command is sent to the TACACS+ server for authorization (this is true regardless of whether the tacplus use-default-template setting is enabled).</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ignore-unknown-mandatory-vsas *boolean*

Synopsis	Ignore unknown mandatory VSAs and fail authentication
Context	configure system security aaa remote-servers tacplus ignore-unknown-mandatory-vsas <i>boolean</i>
Tree	ignore-unknown-mandatory-vsas
Description	<p>When configured to true, the system ignores unknown mandatory VSAs and authentication succeeds.</p> <p>When configured to false, the system ignores unknown mandatory VSAs received in a reply from the TACACS+ server. Authentication fails and the user is disconnected because the system cannot process a mandatory VSA that is unknown.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interactive-authentication *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	configure system security aaa remote-servers tacplus interactive-authentication <i>boolean</i>

Tree	interactive-authentication
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priv-lvl-map

Synopsis	Enter the priv-lvl-map context
Context	configure system security aaa remote-servers tacplus priv-lvl-map
Tree	priv-lvl-map
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priv-lvl [[level](#)] *number*

Synopsis	Enter the priv-lvl list instance
Context	configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i>
Tree	priv-lvl
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[level] *number*

Synopsis	Privilege level for the mapping
Context	configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i>
Tree	priv-lvl
Range	0 to 15
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-profile-name *reference*

Synopsis	User profile for the mapping
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Context	configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> user-profile-name <i>reference</i>
Tree	user-profile-name
Reference	configure system security aaa local-profiles profile <i>named-item</i>
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-preference *keyword*

Synopsis	Route preference to reach the AAA server
Context	configure system security aaa remote-servers tacplus route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[index](#)] *number*

Synopsis	Enter the server list instance
Context	configure system security aaa remote-servers tacplus server <i>number</i>
Tree	server
Max. instances	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	TACACS+ server ID
Context	configure system security aaa remote-servers tacplus server <i>number</i>

Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the TACACS+ server
Context	configure system security aaa remote-servers tacplus server <i>number</i> address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	TCP port to communicate with the TACACS+ server
Context	configure system security aaa remote-servers tacplus server <i>number</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	49
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secret *encrypted-leaf*

Synopsis	Secret key to access the TACACS+ server
Context	configure system security aaa remote-servers tacplus server <i>number</i> secret <i>encrypted-leaf</i>
Tree	secret
Description	This command specifies the secret key to access the TACACS+ server in a protected format.

The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	0 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-connection

Synopsis	Enter the tls-connection context
Context	configure system security aaa remote-servers tacplus server <i>number</i> tls-connection
Tree	tls-connection
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

sni

Synopsis	Enter the sni context
Context	configure system security aaa remote-servers tacplus server <i>number</i> tls-connection sni
Tree	sni
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

host-name *fully-qualified-domain-name*

Synopsis	Server DNS host name sent as TLS SNi when connecting to the TACACS+ server.
Context	configure system security aaa remote-servers tacplus server <i>number</i> tls-connection sni host-name <i>fully-qualified-domain-name</i>
Tree	host-name
String length	1 to 253
String format	'host-name' must contain valid lowercase 1 to 63 character DNS labels
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS client profile for the TACACS+ server TLS connection.
Context	configure system security aaa remote-servers tacplus server <i>number</i> tls-connection tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>named-item</i>
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

tls-port *number*

Synopsis	TCP port for the TLS connection to the TACACS+ server.
Context	configure system security aaa remote-servers tacplus server <i>number</i> tls-connection tls-port <i>number</i>
Tree	tls-port
Range	0 1 to 65535
Default	300
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

server-retry-timeout (*number* | *keyword*)

Synopsis	Time before retrying requests when health checks are disabled
Context	configure system security aaa remote-servers tacplus server-retry-timeout (<i>number</i> <i>keyword</i>)
Tree	server-retry-timeout
Description	This command configures the maximum timeout before retrying requests when health checks are disabled and all TACACS+ servers are operationally down. Set the value of this timer to a lower value or disable it to increase the interactive responsiveness of AAA requests after the servers become unreachable.
Range	1 to 300
Units	seconds
Options	none – Disable retry timeout and send requests immediately
Default	300
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

server-timeout *number*

Synopsis Time to wait for a response from the TACACS+ server

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [tacplus](#) [server-timeout](#) *number*

Tree [server-timeout](#)

Range 1 to 90

Units seconds

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

service-request

Synopsis Enter the **service-request** context

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [tacplus](#) [service-request](#)

Tree [service-request](#)

Description Commands in this context enable Nokia services to be requested from the TACACS+ server when a user authenticates.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nokia-grpc-rpc-authorization *boolean*

Synopsis Request nokia-grpc-rpc-authorization service VSAs

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [tacplus](#) [service-request](#) [nokia-grpc-rpc-authorization](#) *boolean*

Tree [nokia-grpc-rpc-authorization](#)

Description When configured to **true**, the nokia-grpc-rpc-authorization service is requested from the TACACS+ server after successful authentication.

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

nokia-netconf-base-op-authorization *boolean*

Synopsis	Request nokia-netconf-base-op-authorization service VSAs
Context	configure system security aaa remote-servers tacplus service-request nokia-netconf-base-op-authorization <i>boolean</i>
Tree	nokia-netconf-base-op-authorization
Description	When configured to true , the nokia-netconf-base-op-authorization service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-user *boolean*

Synopsis	Request nokia-user service VSAs
Context	configure system security aaa remote-servers tacplus service-request nokia-user <i>boolean</i>
Tree	nokia-user
Description	When configured to true , the nokia-user service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

nokia-user-profile *boolean*

Synopsis	Request nokia-user-profile service VSAs
Context	configure system security aaa remote-servers tacplus service-request nokia-user-profile <i>boolean</i>
Tree	nokia-user-profile
Description	When configured to true , the nokia-user-profile service is requested from the TACACS+ server after successful authentication.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

single-connection *boolean*

Synopsis	Enable TACACS+ single connection mode
Context	configure system security aaa remote-servers tacplus single-connection <i>boolean</i>
Tree	single-connection
Description	When configured to true , the router maintains a persistent TCP connection open to the server to reduce the communication overhead for each request. When configured to false , the router opens a new TCP connection for each request.
Default	false
Introduced	26.10.R1
Platforms	7705 SAR Gen 2

use-default-template *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	configure system security aaa remote-servers tacplus use-default-template <i>boolean</i>
Tree	use-default-template
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vpnr-server

Synopsis	Enter the vpnr-server context
Context	configure system security aaa remote-servers vpnr-server
Tree	vpnr-server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inband *reference*

Synopsis	VPNR service used for AAA by in-band sessions
Context	configure system security aaa remote-servers vpnr-server inband <i>reference</i>
Tree	inband

Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in the Base routing instance.
Reference	configure service vprn service-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

outband *reference*

Synopsis	VPRN service used for AAA by out-of-band sessions
Context	configure system security aaa remote-servers vprn-server outband <i>reference</i>
Tree	outband
Description	This command configures TACACS+ and RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions on the console or out-of-band (OOB) Ethernet ports.
Reference	configure service vprn service-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn *reference*

Synopsis	VPRN used for AAA in VPRNs without a AAA server
Context	configure system security aaa remote-servers vprn-server vprn <i>reference</i>
Tree	vprn
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in VPRNs without a AAA server configured.
Reference	configure service vprn service-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user-template [[user-template-name](#)] *keyword*

Synopsis	Enter the user-template list instance
Context	configure system security aaa user-template <i>keyword</i>
Tree	user-template
Description	Commands in this context configure templates for remote users.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

[user-template-name] *keyword*

Synopsis Default user template applied to the remote user

Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword*

Tree [user-template](#)

Options ldap-default – Default LDAP user template
radius-default – Default RADIUS user template
tacplus-default – Default TACACS+ user template

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

access

Synopsis Enter the **access** context

Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [access](#)

Tree [access](#)

Description Commands in this context grant a user access to the router management access methods. If a user requires access to more than one method, multiple methods can be specified.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

console *boolean*

Synopsis Allow console port, SCP/SFTP, SSH, and Telnet access

Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [access](#) [console](#) *boolean*

Tree [console](#)

Description When configured to **true**, the system allows this access method to take precedence over other access methods in all cases.

Default true

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

console-port-cli *boolean*

Synopsis	Allow console port CLI access
Context	configure system security aaa user-template <i>keyword</i> access console-port-cli <i>boolean</i>
Tree	console-port-cli
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ftp *boolean*

Synopsis	Allow FTP access
Context	configure system security aaa user-template <i>keyword</i> access ftp <i>boolean</i>
Tree	ftp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc *boolean*

Synopsis	Allow gRPC access
Context	configure system security aaa user-template <i>keyword</i> access grpc <i>boolean</i>
Tree	grpc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf *boolean*

Synopsis	Allow NETCONF access
Context	configure system security aaa user-template <i>keyword</i> access netconf <i>boolean</i>
Tree	netconf
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

scp-sftp *boolean*

Synopsis Allow SCP/SFTP access

Context **configure** [system security aaa user-template](#) *keyword* [access scp-sftp](#) *boolean*

Tree [scp-sftp](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

ssh-cli *boolean*

Synopsis Allow SSH CLI access

Context **configure** [system security aaa user-template](#) *keyword* [access ssh-cli](#) *boolean*

Tree [ssh-cli](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

telnet-cli *boolean*

Synopsis Allow Telnet CLI access

Context **configure** [system security aaa user-template](#) *keyword* [access telnet-cli](#) *boolean*

Tree [telnet-cli](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

console

Synopsis Enter the **console** context

Context **configure** [system security aaa user-template](#) *keyword* [console](#)

Tree [console](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

login-exec *string-not-all-spaces*

Synopsis File to execute when the user logs in

Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [console](#) [login-exec](#) *string-not-all-spaces*

Tree [login-exec](#)

String length 1 to 200

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

home-directory *cflash-without-slot-url*

Synopsis User local home directory based on the template

Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [home-directory](#) *cflash-without-slot-url*

Tree [home-directory](#)

Description This command configures the home directory of the user for file access. Files can be accessed locally by CLI **file** commands and output modifiers such as > (file redirect), or remotely via FTP and SCP. If the home directory does not exist, a warning message is displayed when the user logs in.

When **restricted-to-home** is configured, file access is denied unless the **home-directory** is configured and the directory is created by an administrator.

String length 1 to 200

String format 'cflash-without-slot-url' must be cf1-4: followed by path (e.g. cf1:/path)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

profile *named-item*

Synopsis User profile based on the template

Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* [profile](#) *named-item*

Tree [profile](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

	'profile' must not contain spaces
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restricted-to-home *boolean*

Synopsis	Restrict file access to the home directory of the user
Context	configure system security aaa user-template <i>keyword</i> restricted-to-home <i>boolean</i>
Tree	restricted-to-home
Description	<p>When configured to true, the router denies the user from accessing files outside of their local home directory. Files can be accessed locally by CLI file commands and output modifiers such as > (file redirect). The system denies all configuration save operations (such as admin save) via any management interface (such as CLI and NETCONF) unless save-when-restricted is enabled.</p> <p>File access is denied unless a home directory is configured and the directory is created by an administrator.</p> <p>When configured to false, the router permits the user to access all files on the system and to remote files.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

save-when-restricted *boolean*

Synopsis	Save configurations when the user is restricted to home
Context	configure system security aaa user-template <i>keyword</i> save-when-restricted <i>boolean</i>
Tree	save-when-restricted
Description	<p>When configured to true, the system permits configuration save operations for all configuration regions (such as bof and configure) via any management interface (such as CLI and NETCONF) even if restricted-to-home is enabled.</p> <p>The configuration for each region can be saved with admin save CLI commands or when committed over NETCONF and gRPC.</p> <p>When configured to false, the system denies saving the configuration when restricted-to-home is enabled, unless the home directory of the user includes the location of the saved configuration file.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-script

Synopsis	Enter the cli-script context
Context	configure system security cli-script
Tree	cli-script
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authorization

Synopsis	Enter the authorization context
Context	configure system security cli-script authorization
Tree	authorization
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cron

Synopsis	Enter the cron context
Context	configure system security cli-script authorization cron
Tree	cron
Description	Commands in this context configure authorization for the cron job scheduler.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-user reference

Synopsis	User profile name for CLI command script authorization
Context	configure system security cli-script authorization cron cli-user reference
Tree	cli-user
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-handler

Synopsis	Enter the event-handler context
Context	configure system security cli-script authorization event-handler
Tree	event-handler
Description	Commands in this context configure authorization for the Event Handling System (EHS). EHS allows user-controlled programmatic exception handling by allowing a CLI script to be executed upon the detection of a log event.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-user reference

Synopsis	User profile name for CLI command script authorization
Context	configure system security cli-script authorization event-handler cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console-login boolean

Synopsis	Enable logins on the serial console port of the CPM
Context	configure system security console-login <i>boolean</i>
Tree	console-login
Description	<p>When configured to true, the system enables logins on the serial console port of the active CPM.</p> <p>When configured to false, the system disables logins on the serial console port of the active CPM. Boot messages and the pre-login-message, if configured, are displayed, but the login prompt is not displayed.</p> <p>Note: In-band or out-of-band management access must be configured before console logins are disabled so that users can log in to the system.</p>
Default	true
Introduced	25.10.R3
Platforms	7705 SAR Gen 2

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure system security dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure distributed CPU protection (DCP) attributes.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy [[policy-name](#)] *named-item*

Synopsis	Enter the policy list instance
Context	configure system security dist-cpu-protection policy <i>named-item</i>
Tree	policy
Description	Commands in this context configure the attributes of DCP policies. These policies can be applied to objects such as SAPs, network interfaces or ports
Max. instances	130
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policy-name] *named-item*

Synopsis	Policy name
Context	configure system security dist-cpu-protection policy <i>named-item</i>
Tree	policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure system security dist-cpu-protection policy <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-monitoring-policer [[policer-name](#)] *named-item*

Synopsis	Enter the local-monitoring-policer list instance
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i>
Tree	local-monitoring-policer
Max. instances	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-name] *named-item*

Synopsis	Local monitoring policer name
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i>
Tree	local-monitoring-policer
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> description <i>description</i>
Tree	description

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-action *keyword*

Synopsis	Action taken when policer rates are exceeded
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> exceed-action <i>keyword</i>
Tree	exceed-action
Description	This command specifies the action taken on the extracted control packets when the configured policer rates are exceeded.
Options	discard, low-priority, none
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-events *keyword*

Synopsis	Control of log events creation for status and activity
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> log-events <i>keyword</i>
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate

Tree	rate
Description	<p>Commands in this context specify the rate and burst tolerance for the policer.</p> <p>The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kbps

Synopsis	Enter the kbps context
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate kbps
Tree	kbps
Notes	The following elements are part of a choice: kbps or packets .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit (*keyword* | *number*)

Synopsis	Rate limit
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate kbps limit (<i>keyword</i> <i>number</i>)
Tree	limit
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs *number*

Synopsis	Tolerance for the rate
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate kbps mbs <i>number</i>

Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packets

Synopsis	Enter the packets context
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate packets
Tree	packets
Notes	The following elements are part of a choice: kbits or packets .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate packets initial-delay <i>number</i>
Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit (*keyword* | *number*)

Synopsis	Packets per interval limit
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate packets limit (<i>keyword</i> <i>number</i>)

Tree	limit
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

within *number*

Synopsis	Measurement interval for packets rate
Context	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i> rate packets within <i>number</i>
Tree	within
Range	1 to 32767
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol [[protocol-name](#)] *keyword*

Synopsis	Enter the protocol list instance
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i>
Tree	protocol
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[protocol-name] *keyword*

Synopsis	Protocol name
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i>
Tree	protocol
Options	arp, dhcp, http-redirect, icmp, igmp, mld, ndis, pppoe-pppoa, all-unspecified, mpls-ttl, bfd-cpm, bgp, eth-cfm, isis, ldp, ospf, pim, rsvp, icmp-ping-check, lacp, vrrp, multi-chassis, multi-chassis-sync, bfd, ftp, icmp-v4, icmp-v6, l3-to-my-ipv4,

	l3-to-my-ipv6, lsp-ping, mc-lag, mcast-snooping, radius, rip, sbfd-reflector, snmp, ssh, stp, tacacs, telnet, tftp, twamp, needs-icmp, mka-over-udp
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-parameters

Synopsis	Enter the dynamic-parameters context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters
Tree	dynamic-parameters
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detection-time *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters detection-time <i>number</i>
Tree	detection-time
Range	1 to 128000
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-action

Synopsis	Enter the exceed-action context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters exceed-action
Tree	exceed-action
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

action *keyword*

Synopsis Action taken on control packets when rates are exceeded

Context **configure** [system security dist-cpu-protection policy](#) *named-item* [protocol](#) *keyword*
[dynamic-parameters exceed-action action](#) *keyword*

Tree [action](#)

Options discard, low-priority, none

Default none

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hold-down (*keyword* | *number*)

Synopsis Hold down behavior

Context **configure** [system security dist-cpu-protection policy](#) *named-item* [protocol](#) *keyword*
[dynamic-parameters exceed-action hold-down](#) (*keyword* | *number*)

Tree [hold-down](#)

Description This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.

The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.

An indefinite hold down behavior must be cleared using the **tools perform security dist-cpu-protection release-hold-down** command.

Range 1 to 10080

Units seconds

Options indefinite, none

Default none

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

log-events *keyword*

Synopsis Control of log events creation for status and activity

Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters log-events <i>keyword</i>
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kbps

Synopsis	Enter the kbits context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate kbps
Tree	kbps
Notes	The following elements are part of a choice: kbits or packets .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit (*keyword* | *number*)

Synopsis	Rate limit
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Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate kbps limit (<i>keyword</i> <i>number</i>)
Tree	limit
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs *number*

Synopsis	Tolerance for the rate
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate kbps mbs <i>number</i>
Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packets

Synopsis	Enter the packets context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate packets
Tree	packets
Notes	The following elements are part of a choice: kbps or packets .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate packets initial-delay <i>number</i>

Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit (*keyword* | *number*)

Synopsis	Packets per interval limit
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate packets limit (<i>keyword</i> <i>number</i>)
Tree	limit
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

within *number*

Synopsis	Measurement interval for packets rate
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> dynamic-parameters rate packets within <i>number</i>
Tree	within
Range	1 to 32767
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforcement

Synopsis	Enter the enforcement context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> enforcement
Tree	enforcement
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic

Synopsis	Enter the dynamic context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> enforcement dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mon-policer-name *reference*

Synopsis	Dynamic enforcement policer for the protocol
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> enforcement dynamic mon-policer-name <i>reference</i>
Tree	mon-policer-name
Description	This command specifies the dynamic enforcement policer that is instantiated when the associated local monitoring policer is determined to be in a nonconforming state (at the end of a minimum monitoring time of 60 seconds to reduce thrashing).
Reference	configure system security dist-cpu-protection policy <i>named-item</i> local-monitoring-policer <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-local-mon-bypass

Synopsis	Do not include packets in the local monitoring function
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Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> enforcement dynamic-local-mon-bypass
Tree	dynamic-local-mon-bypass
Description	When configured, packets from the protocol are not included in the local monitoring function and the dynamic enforcement policer is not instantiated for the protocol.
Notes	The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static

Synopsis	Enter the static context
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> enforcement static
Tree	static
Notes	The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policer-name *reference*

Synopsis	Static policer enforced by the protocol
Context	configure system security dist-cpu-protection policy <i>named-item</i> protocol <i>keyword</i> enforcement static policer-name <i>reference</i>
Tree	policer-name
Reference	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

static-policer [[policer-name](#)] *named-item*

Synopsis	Enter the static-policer list instance
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i>

Tree	static-policer
Description	<p>Commands in this context configure a static enforcement policer that can be referenced by one or more protocols in the policy. When a policer is referenced by a protocol, the policer is instantiated for each object (for example, a SAP or network interface) that is created and references the policer.</p> <p>If no policer resources are available on the associated card or FP, the object is not created.</p>
Max. instances	28
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policer-name] *named-item*

Synopsis	Static policer name
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i>
Tree	static-policer
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

detection-time *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> detection-time <i>number</i>
Tree	detection-time
Range	1 to 128000
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exceed-action

Synopsis	Enter the exceed-action context
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> exceed-action
Tree	exceed-action
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action taken on control packets when rates are exceeded
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> exceed-action action <i>keyword</i>
Tree	action
Options	discard, low-priority, none
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-down (*keyword* | *number*)

Synopsis	Hold down behavior
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> exceed-action hold-down (<i>keyword</i> <i>number</i>)
Tree	hold-down
Description	<p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the tools perform security dist-cpu-protection release-hold-down command.</p>
Range	1 to 10080
Units	seconds
Options	indefinite, none
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-events *keyword*

Synopsis	Control of log events creation for status and activity
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> log-events <i>keyword</i>
Tree	log-events
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rate

Synopsis	Enter the rate context
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Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate
Tree	rate
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kbps

Synopsis	Enter the kbps context
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate kbps
Tree	kbps
Notes	The following elements are part of a choice: kbps or packets .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit (keyword | number)

Synopsis	Rate limit
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate kbps limit (keyword number)
Tree	limit
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbs number

Synopsis	Tolerance for the rate
----------	------------------------

Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate kbps mbs <i>number</i>
Tree	mbs
Range	0 to 4194304
Units	bytes
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

packets

Synopsis	Enter the packets context
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate packets
Tree	packets
Notes	The following elements are part of a choice: kbps or packets .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

initial-delay *number*

Synopsis	Additional packets allowed in an initial burst
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate packets initial-delay <i>number</i>
Tree	initial-delay
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

limit (*keyword* | *number*)

Synopsis	Packets per interval limit
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Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate packets limit (keyword number)
Tree	limit
Range	0 to 8000
Units	packets per interval
Options	max
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

within *number*

Synopsis	Measurement interval for packets rate
Context	configure system security dist-cpu-protection policy <i>named-item</i> static-policer <i>named-item</i> rate packets within <i>number</i>
Tree	within
Range	1 to 32767
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policy type
Context	configure system security dist-cpu-protection policy <i>named-item</i> type <i>keyword</i>
Tree	type
Options	access-network, port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1x

Synopsis	Enter the dot1x context
Context	configure system security dot1x
Tree	dot1x
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of 802.1x network access control
Context	configure system security dot1x admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

radius-policy [[policy-name](#)] *named-item*

Synopsis	Enter the radius-policy list instance
Context	configure system security dot1x radius-policy <i>named-item</i>
Tree	radius-policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[policy-name](#)] *named-item*

Synopsis	RADIUS server policy name for 802.1X authentication
Context	configure system security dot1x radius-policy <i>named-item</i>
Tree	radius-policy
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the server for authentication

Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *named-item* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

retry *number*

Synopsis Number of RADIUS requests toward the same RADIUS server

Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *named-item* [retry](#) *number*

Tree [retry](#)

Range 1 to 10

Default 3

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

server [[server-index](#)] *number*

Synopsis Enter the **server** list instance

Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *named-item* [server](#) *number*

Tree [server](#)

Max. instances 5

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[server-index] *number*

Synopsis RADIUS server index

Context	configure system security dot1x radius-policy <i>named-item</i> server <i>number</i>
Tree	server
Range	1 to 5
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accounting-port *number*

Synopsis	UDP port to contact the RADIUS server for accounting
Context	configure system security dot1x radius-policy <i>named-item</i> server <i>number</i> accounting-port <i>number</i>
Tree	accounting-port
Range	1 to 65535
Default	1813
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-unicast-address*

Synopsis	IP address of the RADIUS dot1x server
Context	configure system security dot1x radius-policy <i>named-item</i> server <i>number</i> address <i>ipv4-unicast-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-port *number*

Synopsis	UDP port to contact RADIUS server for authentication
Context	configure system security dot1x radius-policy <i>named-item</i> server <i>number</i> authentication-port <i>number</i>
Tree	authentication-port

Range	1 to 65535
Default	1812
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secret *encrypted-leaf*

Synopsis	Secret key associated with the RADIUS server
Context	configure system security dot1x radius-policy <i>named-item</i> server <i>number</i> secret <i>encrypted-leaf</i>
Tree	secret
Description	<p>This command specifies the secret key associated with the RADIUS server in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 110
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type *keyword*

Synopsis	RADIUS server type
Context	configure system security dot1x radius-policy <i>named-item</i> server <i>number</i> type <i>keyword</i>
Tree	type
Options	authorization, accounting, combined
Default	authorization
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address *ipv4-unicast-address*

Synopsis	Source address of the RADIUS packet
Context	configure system security dot1x radius-policy <i>named-item</i> source-address <i>ipv4-unicast-address</i>

Tree	source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	configure system security dot1x radius-policy named-item timeout <i>number</i>
Tree	timeout
Range	1 to 90
Units	seconds
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ftp-server *boolean*

Synopsis	Enable FTP servers running on the system
Context	configure system security ftp-server <i>boolean</i>
Tree	ftp-server
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-control

Synopsis	Enter the hash-control context
Context	configure system security hash-control
Tree	hash-control
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-interface

Synopsis	Enter the management-interface context
Context	configure system security hash-control management-interface
Tree	management-interface
Description	Commands in this context configure encryption parameters for different management interfaces.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

classic-cli

Synopsis	Enter the classic-cli context
Context	configure system security hash-control management-interface classic-cli
Tree	classic-cli
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

read-algorithm *keyword*

Synopsis	Input encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface classic-cli read-algorithm <i>keyword</i>
Tree	read-algorithm
Description	<p>This command specifies how the protected configuration shared secrets are interpreted and which protected formats are accepted when shared secrets are input into the system or read from a configuration file (for example, at system bootup time).</p> <p>The all-hash option specifies that the system accepts any protected format.</p> <p>See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
Options	all-hash, hash, hash2, custom, hash3
Default	all-hash
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

write-algorithm keyword

Synopsis	Output encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface classic-cli write-algorithm keyword
Tree	write-algorithm
Description	<p>This command specifies the format of the output for configuration shared secrets (for example, in the saved configuration file, or in the output of the info or show commands).</p> <p>The cleartext keyword specifies that shared secrets are output in cleartext. Nokia does not recommend this option unless access to configuration is strictly controlled.</p> <p>If a primary secret is configured, the default of this command is hash3. Otherwise the default is hash2.</p> <p>See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
Options	cleartext, hash, hash2, custom, hash3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc

Synopsis	Enter the grpc context
Context	configure system security hash-control management-interface grpc
Tree	grpc
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm keyword

Synopsis	Encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface grpc hash-algorithm keyword
Tree	hash-algorithm
Description	<p>This command specifies the format of the output for protected configuration shared secrets.</p> <p>The cleartext keyword specifies that shared secrets are output in cleartext. Nokia does not recommend this option unless access to configuration is strictly controlled.</p>

If a primary secret is configured, the default of this command is **hash3**. Otherwise the default is **hash2**.

See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

Options	cleartext, hash, hash2, custom, hash3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

md-cli

Synopsis	Enter the md-cli context
Context	configure system security hash-control management-interface md-cli
Tree	md-cli
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm keyword

Synopsis	Encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface md-cli hash-algorithm keyword
Tree	hash-algorithm
Description	<p>This command specifies the format of the output for protected configuration shared secrets.</p> <p>The cleartext keyword specifies that shared secrets are output in cleartext. Nokia does not recommend this option unless access to configuration is strictly controlled.</p> <p>If a primary secret is configured, the default of this command is hash3. Otherwise the default is hash2.</p> <p>See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
Options	cleartext, hash, hash2, custom, hash3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf

Synopsis	Enter the netconf context
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Context	configure system security hash-control management-interface netconf
Tree	netconf
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	configure system security hash-control management-interface netconf hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Description	<p>This command specifies the format of the output for protected configuration shared secrets.</p> <p>The cleartext keyword specifies that shared secrets are output in cleartext. Nokia does not recommend this option unless access to configuration is strictly controlled.</p> <p>If a primary secret is configured, the default of this command is hash3. Otherwise the default is hash2.</p> <p>See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
Options	cleartext, hash, hash2, custom, hash3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keychains

Synopsis	Enter the keychains context
Context	configure system security keychains
Tree	keychains
Description	Commands in this context configure the keychains for the authentication of control protocol peers, such as BGP, IS-IS, LDP, OSPF, and RSVP peers.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

keychain [[keychain-name](#)] *named-item*

Synopsis	Enter the keychain list instance
Context	configure system security keychains keychain <i>named-item</i>

Tree	keychain
Description	Commands in this context configure keychain options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[keychain-name] *named-item*

Synopsis	Keychain name
Context	configure system security keychains keychain <i>named-item</i>
Tree	keychain
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the keychain
Context	configure system security keychains keychain <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

bidirectional

Synopsis	Enter the bidirectional context
Context	configure system security keychains keychain <i>named-item</i> bidirectional
Tree	bidirectional
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[keychain-entry-index](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i>
Tree	entry
Description	Commands in this context create a keychain entry, which represents a key configuration to apply to a keychain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[keychain-entry-index] *number*

Synopsis	Keychain ID
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i>
Tree	entry
Range	0 to 63 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

algorithm keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i> algorithm <i>keyword</i>
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16, aes-128-cmac-128, hmac-sha-256-96, hmac-sha-256-128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key encrypted-leaf**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command configures the authentication key used by the encryption algorithm to sign and authenticate the protocol packet.</p> <p>If the algorithm is based on AES and the specified key is not the exact length required by the associated algorithm, the following steps are taken, depending on the protocol:</p> <ul style="list-style-type: none"> • For protocols using TCP-AO (BGP, LDP, and PCEP), the key is processed as described in RFC 4615. All key lengths are valid. • For all other protocols (OSPF, IS-IS, RSVP, NTP, and MACsec), if the key is shorter than the required length, the key is padded with zeros; if it is longer, it is truncated. <p>For algorithms based on AES-128, the required key length is 16 bytes.</p> <p>For algorithms based on AES-256, the required key length is 32 bytes.</p> <p>In all other cases, all key lengths are valid and the specified key is not padded nor truncated.</p>

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	1 to 110
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

begin-time *date-and-time*

Synopsis	Calendar date and time to start using the key
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i> begin-time <i>date-and-time</i>
Tree	begin-time
Description	This command specifies the calendar date and time which this specific key entry becomes active and creates an MKA session. If no date and time is set, the begin-time is represented by a date and time string with all NULLs and the key is not valid.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

option *keyword*

Synopsis	Keychain key option
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i> option <i>keyword</i>
Tree	option
Options	none, basic, isis-enhanced
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tolerance (*number* | *keyword*)

Synopsis	Time eligible receive key overlaps with active send key
Context	configure system security keychains keychain <i>named-item</i> bidirectional entry <i>number</i> tolerance (<i>number</i> <i>keyword</i>)
Tree	tolerance

Range	0 to 4294967294
Units	seconds
Options	infinite
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security keychains keychain <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

macsec

Synopsis	Enter the macsec context
Context	configure system security keychains keychain <i>named-item</i> macsec
Tree	macsec
Description	Commands in this context configure the key entries for the MACsec keychain.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

entry [[keychain-entry-index](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>named-item</i> macsec entry <i>number</i>
Tree	entry
Description	Commands in this context configure a specific key entry in the keychain. Entries are defined by an entry ID. Each MACsec key entry creates a dedicated MKA for that key entry. MKA uses the key entry's CAK and its encryption algorithm to secure the SAK between peers.

The MACsec key entry with an ID of 0 can be configured with a tolerance of forever and can be used as a backup key entry. If at the begin time of any key entry there is a problem with establishing MKA, the keychain may fallback to the backup key entry.

Introduced 25.10.R1
Platforms 7705 SAR Gen 2

[keychain-entry-index] *number*

Synopsis Keychain ID
Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *named-item* [macsec](#) [entry](#) *number*
Tree [entry](#)
Range 0 to 63
Notes This element is part of a list key.
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the keychain entry
Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *named-item* [macsec](#) [entry](#) *number* [admin-state](#) *keyword*
Tree [admin-state](#)
Options enable, disable
Default enable
Introduced 25.10.R1
Platforms 7705 SAR Gen 2

algorithm *keyword*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Encryption algorithm used by the keychain key
Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *named-item* [macsec](#) [entry](#) *number* [algorithm](#) *keyword*
Tree [algorithm](#)

Options	aes-128-cmac-128 – Algorithm based on AES-CMAC and key size of 128 bits aes-256-cmac-256 – Algorithm based on AES-CMAC and key size of 256 bits
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

begin-time *date-and-time*

Synopsis	Calendar date and time to start using the key
Context	configure system security keychains keychain <i>named-item</i> macsec entry <i>number</i> begin-time <i>date-and-time</i>
Tree	begin-time
Description	This command specifies the calendar date and time which this specific key entry becomes active and creates an MKA session. If no date and time is set, the begin-time is represented by a date and time string with all NULLs and the key is not valid.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

cak *encrypted-leaf-hex-without-prefix*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	CAK used by the encryption algorithm
Context	configure system security keychains keychain <i>named-item</i> macsec entry <i>number</i> cak <i>encrypted-leaf-hex-without-prefix</i>
Tree	cak
Description	This command configures the CAK to be used by the encryption algorithm.
String length	1 to 126
String format	'encrypted-leaf-hex-without-prefix' must have clear text in hex without 0x or end with hash/hash2/hash3/custom
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

cak-name *cak-name*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	CAK name
Context	configure system security keychains keychain <i>named-item</i> macsec entry <i>number</i> cak-name <i>cak-name</i>
Tree	cak-name
String length	1 to 64
String format	'cak-name' must be even-length hex up to 64 characters (e.g. 0a1b2c)
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

tolerance (*number* | *keyword*)

Synopsis	Time a receive key should overlap with active send key
Context	configure system security keychains keychain <i>named-item</i> macsec entry <i>number</i> tolerance (<i>number</i> <i>keyword</i>)
Tree	tolerance
Description	This command configures the amount of time that the key entry MKA session can overlap with the newly active key entry MKA session. The current key entry MKA session is established up to the tolerance time but is not the principle (encrypting) MKA if the new key entry MKA session is established.
Range	20 to 4294967294
Units	seconds
Options	infinite
Default	300
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

receive

Synopsis	Enter the receive context
Context	configure system security keychains keychain <i>named-item</i> receive

Tree	receive
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[keychain-entry-index](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>named-item</i> receive entry <i>number</i>
Tree	entry
Description	Commands in this context create a keychain entry, which represents a key configuration to apply to a keychain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[keychain-entry-index] *number*

Synopsis	Keychain ID
Context	configure system security keychains keychain <i>named-item</i> receive entry <i>number</i>
Tree	entry
Range	0 to 63 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	configure system security keychains keychain <i>named-item</i> receive entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

algorithm keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	configure system security keychains keychain <i>named-item</i> receive entry <i>number</i> algorithm <i>keyword</i>
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16, aes-128-cmac-128, hmac-sha-256-96, hmac-sha-256-128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key encrypted-leaf**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	configure system security keychains keychain <i>named-item</i> receive entry <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	<p>This command configures the authentication key used by the encryption algorithm to sign and authenticate the protocol packet.</p> <p>If the algorithm is based on AES and the specified key is not the exact length required by the associated algorithm, the following steps are taken, depending on the protocol:</p> <ul style="list-style-type: none"> • For protocols using TCP-AO (BGP, LDP, and PCEP), the key is processed as described in RFC 4615. All key lengths are valid. • For all other protocols (OSPF, IS-IS, RSVP, NTP, and MACsec), if the key is shorter than the required length, the key is padded with zeros; if it is longer, it is truncated. <p>For algorithms based on AES-128, the required key length is 16 bytes.</p> <p>For algorithms based on AES-256, the required key length is 32 bytes.</p> <p>In all other cases, all key lengths are valid and the specified key is not padded nor truncated.</p>

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	1 to 110
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

begin-time *date-and-time*

Synopsis	Calendar date and time to start using the key
Context	configure system security keychains keychain <i>named-item</i> receive entry number begin-time date-and-time
Tree	begin-time
Description	<p>This command specifies the calendar date and time which this specific key entry becomes active and creates an MKA session.</p> <p>If no date and time is set, the begin-time is represented by a date and time string with all NULLs and the key is not valid.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end-time *date-and-time*

Synopsis	Calendar date and time when system stops using the key
Context	configure system security keychains keychain <i>named-item</i> receive entry number end-time date-and-time
Tree	end-time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tolerance (*number* | *keyword*)

Synopsis	Time eligible receive key overlaps with active send key
Context	configure system security keychains keychain <i>named-item</i> receive entry number tolerance (number keyword)
Tree	tolerance
Range	0 to 4294967294
Units	seconds

Options	infinite
Default	300
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send

Synopsis	Enter the send context
Context	configure system security keychains keychain <i>named-item</i> send
Tree	send
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[keychain-entry-index](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security keychains keychain <i>named-item</i> send entry <i>number</i>
Tree	entry
Description	Commands in this context create a keychain entry, which represents a key configuration to apply to a keychain.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[keychain-entry-index](#)] *number*

Synopsis	Keychain ID
Context	configure system security keychains keychain <i>named-item</i> send entry <i>number</i>
Tree	entry
Range	0 to 63 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the keychain entry
Context	configure system security keychains keychain <i>named-item</i> send entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

algorithm *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	configure system security keychains keychain <i>named-item</i> send entry <i>number</i> algorithm <i>keyword</i>
Tree	algorithm
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16, aes-128-cmac-128, hmac-sha-256-96, hmac-sha-256-128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key *encrypted-leaf***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	configure system security keychains keychain <i>named-item</i> send entry <i>number</i> authentication-key <i>encrypted-leaf</i>
Tree	authentication-key
Description	This command configures the authentication key used by the encryption algorithm to sign and authenticate the protocol packet.

If the algorithm is based on AES and the specified key is not the exact length required by the associated algorithm, the following steps are taken, depending on the protocol:

- For protocols using TCP-AO (BGP, LDP, and PCEP), the key is processed as described in RFC 4615. All key lengths are valid.
- For all other protocols (OSPF, IS-IS, RSVP, NTP, and MACsec), if the key is shorter than the required length, the key is padded with zeros; if it is longer, it is truncated.

For algorithms based on AES-128, the required key length is 16 bytes.

For algorithms based on AES-256, the required key length is 32 bytes.

In all other cases, all key lengths are valid and the specified key is not padded nor truncated.

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length	1 to 110
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

begin-time *date-and-time*

Synopsis	Calendar date and time to start using the key
Context	configure system security keychains keychain <i>named-item</i> send entry <i>number</i> begin-time <i>date-and-time</i>
Tree	begin-time
Description	<p>This command specifies the calendar date and time which this specific key entry becomes active and creates an MKA session.</p> <p>If no date and time is set, the begin-time is represented by a date and time string with all NULLs and the key is not valid.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tcp-option-number

Synopsis	Enter the tcp-option-number context
Context	configure system security keychains keychain <i>named-item</i> tcp-option-number
Tree	tcp-option-number
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

receive keyword

Synopsis	TCP option accepted in received TCP packets
Context	configure system security keychains keychain <i>named-item</i> tcp-option-number receive keyword
Tree	receive
Options	option-253, option-254, both, tcp-ao
Default	option-254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send keyword

Synopsis	TCP option accepted in sent TCP packets
Context	configure system security keychains keychain <i>named-item</i> tcp-option-number send keyword
Tree	send
Options	option-253, option-254, tcp-ao
Default	option-254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management

Synopsis	Enter the management context
Context	configure system security management
Tree	management
Description	Commands in this context control which management protocols can be used to access the SR OS router via the 'Base' and 'management' router instances.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ftp boolean

Synopsis	Allow access to the FTP server
Context	configure system security management allow-ftp <i>boolean</i>

Tree	allow-ftp
Description	When configured to true , this command allows FTP access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , this command disallows access to the SR OS FTP server.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	configure system security management allow-grpc <i>boolean</i>
Tree	allow-grpc
Description	When configured to true , the system allows access to the gRPC server via the 'Base' and 'management' router instances.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-netconf *boolean*

Synopsis	Allow access to the NETCONF server
Context	configure system security management allow-netconf <i>boolean</i>
Tree	allow-netconf
Description	When configured to true , the system allows NETCONF server access to the SR OS router via the 'Base' and 'management' router instances.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ssh *boolean*

Synopsis	Allow access to the SSH server
Context	configure system security management allow-ssh <i>boolean</i>
Tree	allow-ssh

Description	When configured to true , this command allows SSH server access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , this command disallows SSH server access.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-telnet *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	configure system security management allow-telnet <i>boolean</i>
Tree	allow-telnet
Description	When configured to true , the system allows IPv4 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , access to the IPv4 Telnet server is not allowed.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-telnet6 *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	configure system security management allow-telnet6 <i>boolean</i>
Tree	allow-telnet6
Description	When configured to true , the system allows IPv6 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to false , the system prevents access to the IPv6 Telnet server.
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

management-access-filter

Synopsis	Enter the management-access-filter context
Context	configure system security management-access-filter

Tree	management-access-filter
Description	<p>Commands in this context configure the attributes for management access filters.</p> <p>Management access filters control all traffic in and out of the CPM. The filters can be used to restrict management of the router by other nodes outside of specific networks (or sub-networks) or through designated ports.</p> <p>Management filters are enforced by the system software.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-filter

Synopsis	Enter the ip-filter context
Context	configure system security management-access-filter ip-filter
Tree	ip-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	configure system security management-access-filter ip-filter admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Default action for the management access filter
Context	configure system security management-access-filter ip-filter default-action keyword
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop, reject
Default	ignore-match

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure system security management-access-filter ip-filter entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	configure system security management-access-filter ip-filter entry <i>number</i>
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action associated with the management access filter
Context	configure system security management-access-filter ip-filter entry <i>number</i> action <i>keyword</i>
Tree	action
Description	This command specifies the action associated with the management access filter match criteria entry. If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop, reject
Default	ignore-match

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

description *description*

Synopsis Text description
Context **configure** [system security management-access-filter ip-filter entry number description](#)
Tree [description](#)
String length 1 to 80
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

log-events *boolean*

Synopsis Enable match logging
Context **configure** [system security management-access-filter ip-filter entry number log-events boolean](#)
Tree [log-events](#)
Description When configured to **true**, this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.
When configured to **false**, match logging is disabled.
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

match

Synopsis Enter the **match** context
Context **configure** [system security management-access-filter ip-filter entry number match](#)
Tree [match](#)
Description Commands in this context specify match criteria for the entry.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

dst-port

Synopsis	Enable the dst-port context
Context	configure system security management-access-filter ip-filter entry <i>number</i> match dst-port
Tree	dst-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match dst-port mask <i>number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match dst-port port <i>number</i>
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mgmt-port

Synopsis	Enter the mgmt-port context
Context	configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port

Tree	mgmt-port
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpm

Synopsis	Match any traffic received on any Ethernet port
Context	configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port cpm
Tree	cpm
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag *lag-interface*

Synopsis	LAG ID as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port lag <i>lag-interface</i>
Tree	lag
String length	1 to 27
String format	'lag-interface' must be lag- followed by number 1-800 or up to 23 chars (e.g. lag-1 or lag-my-lag)
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id *port*

Synopsis	Port ID as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port port-id <i>port</i>
Tree	port-id
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

protocol (*number* | *keyword*)

Synopsis IP protocol as the match criterion

Context **configure** [system security management-access-filter ip-filter entry](#) *number* [match protocol](#) (*number* | *keyword*)

Tree [protocol](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-instance *string*

Synopsis Router instance as the match criterion

Context **configure** [system security management-access-filter ip-filter entry](#) *number* [match router-instance](#) *string*

Tree [router-instance](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

src-ip

Synopsis Enter the **src-ip** context

Context **configure** [system security management-access-filter ip-filter entry](#) *number* [match src-ip](#)

Tree [src-ip](#)

Description Commands in this context specify match criteria based on the source IP address.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

address (*ipv4-prefix* | *ipv4-address*)

Synopsis IP address or IP prefix as the match criterion

Context	configure system security management-access-filter ip-filter entry number match src-ip address (<i>ipv4-prefix ipv4-address</i>)
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ip-prefix-list *reference*

Synopsis	IP prefix list as the match criterion
Context	configure system security management-access-filter ip-filter entry number match src-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list named-item
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv4-address*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ip-filter entry number match src-ip mask ipv4-address
Tree	mask
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enable the src-port context
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Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-port
Tree	src-port
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-port mask <i>number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ip-filter entry <i>number</i> match src-port port <i>number</i>
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-filter

Synopsis	Enter the ipv6-filter context
Context	configure system security management-access-filter ipv6-filter
Tree	ipv6-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	configure system security management-access-filter ipv6-filter admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Default action for the management access filter
Context	configure system security management-access-filter ipv6-filter default-action <i>keyword</i>
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security management-access-filter ipv6-filter entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	configure system security management-access-filter ipv6-filter entry <i>number</i>
Tree	entry

Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action associated with the management access filter
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> action <i>keyword</i>
Tree	action
Description	<p>This command specifies the action associated with the management access filter match criteria entry.</p> <p>If the packet does not meet any of the match criteria, the configured default action is applied.</p>
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-events *boolean*

Synopsis	Enable match logging
Context	configure system security management-access-filter ipv6-filter entry number log-events <i>boolean</i>
Tree	log-events
Description	When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to false , match logging is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure system security management-access-filter ipv6-filter entry number match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-port

Synopsis	Enable the dst-port context
Context	configure system security management-access-filter ipv6-filter entry number match dst-port
Tree	dst-port
Description	Commands in this context specify match criteria based on the destination port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	IP address mask as the match criterion
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Context	configure system security management-access-filter ipv6-filter entry <i>number match dst-port mask number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port number

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match dst-port port number</i>
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

flow-label number

Synopsis	Flow identifier used to discriminate traffic flows
Context	configure system security management-access-filter ipv6-filter entry <i>number match flow-label number</i>
Tree	flow-label
Range	0 to 1048575
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mgmt-port

Synopsis	Enter the mgmt-port context
Context	configure system security management-access-filter ipv6-filter entry <i>number match mgmt-port</i>
Tree	mgmt-port
Description	Commands in this context specify match criteria based on the Ethernet port.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cpm

Synopsis	Match any traffic received on any Ethernet port
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port cpm
Tree	cpm
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag *lag-interface*

Synopsis	LAG ID as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port lag <i>lag-interface</i>
Tree	lag
String length	1 to 27
String format	'lag-interface' must be lag- followed by number 1-800 or up to 23 chars (e.g. lag-1 or lag-my-lag)
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port-id *port*

Synopsis	Port ID as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port port-id <i>port</i>
Tree	port-id
Notes	The following elements are part of a choice: cpm , (lag and lag-id), or port-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router instance as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match router-instance <i>string</i>
Tree	router-instance
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-ip

Synopsis	Enter the src-ip context
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match src-ip
Tree	src-ip
Description	Commands in this context specify match criteria based on the source port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv6-prefix* | *ipv6-address*)

Synopsis	IPv6 address or IPv6 prefix to match
Context	configure system security management-access-filter ipv6-filter entry <i>number</i> match src-ip address (<i>ipv6-prefix</i> <i>ipv6-address</i>)

Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match src-ip ipv6-prefix-list reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>named-item</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *ipv6-address*

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match src-ip mask ipv6-address</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-port

Synopsis	Enable the src-port context
Context	configure system security management-access-filter ipv6-filter entry <i>number match src-port</i>
Tree	src-port
Description	Commands in this context specify match criteria based on the source port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask number

Synopsis	IP address mask as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match src-port mask number</i>
Tree	mask
Range	1 to 65535
Default	65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port number

Synopsis	TCP or UDP port number as the match criterion
Context	configure system security management-access-filter ipv6-filter entry <i>number match src-port port number</i>
Tree	port
Range	1 to 65535
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac-filter

Synopsis	Enter the mac-filter context
Context	configure system security management-access-filter mac-filter
Tree	mac-filter
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state keyword

Synopsis	Administrative state of management access MAC filter
Context	configure system security management-access-filter mac-filter admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-action *keyword*

Synopsis	Default action for the management access filter
Context	configure system security management-access-filter mac-filter default-action <i>keyword</i>
Tree	default-action
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure system security management-access-filter mac-filter entry <i>number</i>
Tree	entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	configure system security management-access-filter mac-filter entry <i>number</i>
Tree	entry
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

action *keyword*

Synopsis	Action associated with the management access filter
Context	configure system security management-access-filter mac-filter entry <i>number</i> action keyword
Tree	action
Description	<p>This command specifies the action associated with the management access filter match criteria entry.</p> <p>If the packet does not meet any of the match criteria, the configured default action is applied.</p>
Options	ignore-match, accept, drop
Default	ignore-match
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security management-access-filter mac-filter entry <i>number</i> description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

log-events *boolean*

Synopsis	Enable match logging
Context	configure system security management-access-filter mac-filter entry <i>number</i> log-events boolean
Tree	log-events
Description	When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.

	When configured to false , match logging is disabled.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

match

Synopsis	Enter the match context
Context	configure system security management-access-filter mac-filter entry number match
Tree	match
Description	Commands in this context specify match criteria for the entry.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cfm-opcode

Synopsis	Enter the cfm-opcode context
Context	configure system security management-access-filter mac-filter entry number match cfm-opcode
Tree	cfm-opcode
Description	Commands in this context specify match criteria based on the CFM opcode.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

eq number

Synopsis	Equal to comparison operator for the CFM opcode
Context	configure system security management-access-filter mac-filter entry number match cfm-opcode eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

gt number

Synopsis	Greater than comparison operator for the CFM opcode
Context	configure system security management-access-filter mac-filter entry <i>number</i> match cfm-opcode gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lt number

Synopsis	Less than comparison operator for the CFM opcode
Context	configure system security management-access-filter mac-filter entry <i>number</i> match cfm-opcode lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

range

Synopsis	Enable the range context
Context	configure system security management-access-filter mac-filter entry <i>number</i> match cfm-opcode range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

end number

Synopsis	Upper bound of the range for the OpCode to match
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Context	configure system security management-access-filter mac-filter entry <i>number match cfm-opcode range end</i> <i>number</i>
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start *number*

Synopsis	Lower bound of the range for the OpCode to match
Context	configure system security management-access-filter mac-filter entry <i>number match cfm-opcode range start</i> <i>number</i>
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dot1p

Synopsis	Enable the dot1p context
Context	configure system security management-access-filter mac-filter entry <i>number match dot1p</i>
Tree	dot1p
Description	Commands in this context specify match criteria based on the IEEE 802.1p value.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	3-bit mask as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match dot1p mask</i> <i>number</i>
Tree	mask
Range	1 to 7

Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority *number*

Synopsis	IEEE 802.1p value as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match dot1p priority number</i>
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dst-mac

Synopsis	Enable the dst-mac context
Context	configure system security management-access-filter mac-filter entry <i>number match dst-mac</i>
Tree	dst-mac
Description	Commands in this context specify match criteria based on the destination MAC.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *mac-address*

Synopsis	MAC address used as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match dst-mac address mac-address</i>
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *mac-address*

Synopsis	MAC address mask as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match dst-mac mask <i>mac-address</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

etype *etype-value*

Synopsis	Ethernet type II Ethertype value as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match etype <i>etype-value</i>
Tree	etype
Description	<p>This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.</p> <p>The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.</p>
String length	5 to 6
String format	'etype-value' must be 0x0600-0xFFFF (e-type range)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

frame-type *keyword*

Synopsis	MAC frame type as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match frame-type <i>keyword</i>
Tree	frame-type
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, 802dot1-ag
Default	802dot3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

llc-dsap

Synopsis	Enable the llc-dsap context
Context	configure system security management-access-filter mac-filter entry <i>number</i> match llc-dsap
Tree	llc-dsap
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dsap *number*

Synopsis	8-bit DSAP as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match llc-dsap dsap <i>number</i>
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	Mask for DSAP value as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match llc-dsap mask <i>number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

llc-ssap

Synopsis	Enable the llc-ssap context
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Context	configure system security management-access-filter mac-filter entry <i>number match llc-ssap</i>
Tree	llc-ssap
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *number*

Synopsis	Mask for SSAP value as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match llc-ssap mask</i> <i>number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssap *number*

Synopsis	8-bit SSAP as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number match llc-ssap ssap</i> <i>number</i>
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service *service-name*

Synopsis	Service ID used as the match condition
Context	configure system security management-access-filter mac-filter entry <i>number match service</i> <i>service-name</i>
Tree	service

String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snap-oui *keyword*

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame OUI value for match
Context	configure system security management-access-filter mac-filter entry <i>number match snap-oui keyword</i>
Tree	snap-oui
Description	This command specifies the IEEE 802.3 LLC SNAP Ethernet Frame OUI value as the MAC filter match criterion.
Options	zero, non-zero
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snap-pid *number*

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame PID as the match
Context	configure system security management-access-filter mac-filter entry <i>number match snap-pid number</i>
Tree	snap-pid
Description	<p>This command specifies an IEEE 802.3 LLC SNAP Ethernet Frame PID value used as the MAC filter match criterion.</p> <p>The SNAP PID match criterion is independent of the OUI field within the SNAP header. Two packets with different 3-byte OUI fields but the same PID field match the same filter entry based on a SNAP PID match criterion.</p>
Range	0 to 65535
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

src-mac

Synopsis	Enable the src-mac context
Context	configure system security management-access-filter mac-filter entry <i>number match src-mac</i>

Tree	src-mac
Description	Commands in this context specify match criteria based on the source MAC.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *mac-address*

Synopsis	MAC address used as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match src-mac address <i>mac-address</i>
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask *mac-address*

Synopsis	MAC address mask as the match criterion
Context	configure system security management-access-filter mac-filter entry <i>number</i> match src-mac mask <i>mac-address</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pki

Synopsis	Enter the pki context
Context	configure system security pki
Tree	pki
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile [[ca-profile-name](#)] *named-item*

Synopsis	Enter the ca-profile list instance
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Context	configure system security pki ca-profile <i>named-item</i>
Tree	ca-profile
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-profile-name] *named-item*

Synopsis	CA profile name
Context	configure system security pki ca-profile <i>named-item</i>
Tree	ca-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the CA profile
Context	configure system security pki ca-profile <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

auto-crl-update

Synopsis	Enable the auto-crl-update context
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update
Tree	auto-crl-update
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the automatic CRL update
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crl-urls**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the crl-urls context
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update crl-urls
Tree	crl-urls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

url-entry [[entry-id](#)] *number*

Synopsis	Enter the url-entry list instance
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update crl-urls url-entry <i>number</i>
Tree	url-entry
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	URL on this system
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update crl-urls url-entry <i>number</i>

Tree	url-entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmission-profile *reference*

Synopsis	File transmission profile to update CRL
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update crl-urls url-entry <i>number</i> transmission-profile <i>reference</i>
Tree	transmission-profile
Reference	configure system transmission-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

url *http-url-path-loose*

Synopsis	Location of updated CRL
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update crl-urls url-entry <i>number</i> url <i>http-url-path-loose</i>
Tree	url
String length	1 to 180
String format	'http-url-loose' must be http:// with host and optional port and path (e.g. http://hostname.domain/path) 'http-url-path-loose' must include path after host (e.g. http://host/path)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

periodic-update-interval *number*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval between two consecutive CRL updates
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Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update periodic-update-interval <i>number</i>
Tree	periodic-update-interval
Range	3600 to 31622400
Units	seconds
Default	86400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

pre-update-time *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time prior to the next update time of the current CRL
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update pre-update-time <i>number</i>
Tree	pre-update-time
Range	0 to 31622400
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval before retrying to update CRL
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update retry-interval <i>number</i>
Tree	retry-interval
Range	0 to 31622400
Units	seconds

Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

schedule-type *keyword*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time scheduler type for an automated CRL update
Context	configure system security pki ca-profile <i>named-item</i> auto-crl-update schedule-type <i>keyword</i>
Tree	schedule-type
Options	next-update-based, periodic
Default	next-update-based
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-file *pki-file-name*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate file name
Context	configure system security pki ca-profile <i>named-item</i> cert-file pki-file-name
Tree	cert-file
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cmpv2

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cmpv2 context
Context	configure system security pki ca-profile <i>named-item</i> cmpv2
Tree	cmpv2
Description	Commands in this context configure CMPv2 options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

accept-unprotected-message

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the accept-unprotected-message context
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 accept-unprotected-message
Tree	accept-unprotected-message
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

error-message *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected error messages
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 accept-unprotected-message error-message <i>boolean</i>
Tree	error-message
Default	false
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

pkiconf-message *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected PKI confirmation messages
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 accept-unprotected-message pkiconf-message <i>boolean</i>
Tree	pkiconf-message
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

always-set-sender-for-ir *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Set subject name in CMPv2 header for all IR messages
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 always-set-sender-for-ir <i>boolean</i>
Tree	always-set-sender-for-ir
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

http



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the http context
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 http

Tree	http
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

response-timeout *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP response timeout
Context	configure system security pki ca-profile <i>named-item cmpv2 http response-timeout number</i>
Tree	response-timeout
Range	1 to 3600
Units	seconds
Default	30
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP version for CMPv2 messages
Context	configure system security pki ca-profile <i>named-item cmpv2 http version keyword</i>
Tree	version
Options	1.0, 1.1
Default	1.1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-list



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-list context
Context	configure system security pki ca-profile <i>named-item cmpv2</i> key-list
Tree	key-list
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key [[reference-number](#)] *display-string*

Synopsis	Enter the key list instance
Context	configure system security pki ca-profile <i>named-item cmpv2</i> key-list key <i>display-string</i>
Tree	key
Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[reference-number](#)] *display-string*

Synopsis	Unique identifier for the CA initial authentication key
Context	configure system security pki ca-profile <i>named-item cmpv2</i> key-list key <i>display-string</i>
Tree	key
String length	1 to 64
String format	'reference-number' must not be all spaces
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *encrypted-leaf*

Synopsis	Shared secret for this CA initial authentication key
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Context	configure system security pki ca-profile <i>named-item</i> cmpv2 key-list key display-string password <i>encrypted-leaf</i>
Tree	password
Description	This command specifies the shared secret for this CA initial authentication key in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

recipient-subject *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DN attributes for recipient subject of CMPv2 requests
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 recipient-subject <i>string</i>
Tree	recipient-subject
String length	1 to 256
Notes	The following elements are part of a choice: recipient-subject or use-ca-subject .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

response-signing-cert *pki-file-name*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	File name of the certificate to verify CMPv2 responses
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 response-signing-cert <i>pki-file-name</i>
Tree	response-signing-cert
Description	This command specifies an imported certificate used to verify the CMP response message that they are protected by signature.

	When unconfigured, CA's certificate is used.
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	The following elements are part of a choice: response-signing-cert or response-signing-use-extracert .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

response-signing-use-extracert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use extraCerts certificate to verify response signature
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 response-signing-use-extracert
Tree	response-signing-use-extracert
Notes	The following elements are part of a choice: response-signing-cert or response-signing-use-extracert .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

same-recipient-nonce-for-poll-request *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use same recipNonce as last CMPv2 response
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 same-recipient-nonce-for-poll-request <i>boolean</i>
Tree	same-recipient-nonce-for-poll-request
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signing-cert-subject *string*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subject DN attributes to identify signing certificate
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 signing-cert-subject <i>string</i>
Tree	signing-cert-subject
String length	1 to 256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

url

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the url context
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 url
Tree	url
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 url service-name <i>service-name</i>
Tree	service-name
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Notes	The following elements are part of a choice: service-name or transmission-profile .

Introduced25.3.R2

Platforms7705 SAR Gen 2

transmission-profile *reference*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisTransmission profile for CMPv2

Context**configure** **system** **security** **pki** **ca-profile** *named-item* **cmpv2** **url** **transmission-profile** *reference*

Tree**transmission-profile**

Reference**configure** **system** **transmission-profile** *named-item*

NotesThe following elements are part of a choice: **service-name** or **transmission-profile**.

Introduced25.3.R2

Platforms7705 SAR Gen 2

url-string *http-optional-url-loose*



WARNING:
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

SynopsisURL for CMPv2

Context**configure** **system** **security** **pki** **ca-profile** *named-item* **cmpv2** **url** **url-string** *http-optional-url-loose*

Tree**url-string**

String length1 to 180

String format'http-optional-url-loose' must be http:// or host-only, with optional port and path (e.g. http://hostname.domain/path)

Introduced25.3.R2

Platforms7705 SAR Gen 2

use-ca-subject

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use subject DN in CA certificate as CMPv2 request recipient
Context	configure system security pki ca-profile <i>named-item</i> cmpv2 use-ca-subject
Tree	use-ca-subject
Notes	The following elements are part of a choice: recipient-subject or use-ca-subject .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crl-file *pki-file-name*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate Revocation List (CRL) file name
Context	configure system security pki ca-profile <i>named-item</i> crl-file pki-file-name
Tree	crl-file
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security pki ca-profile <i>named-item</i> description description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ocsp

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the ocsp context
Context	configure system security pki ca-profile <i>named-item</i> ocsp
Tree	ocsp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

responder-url *http-optional-url-loose*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP URL of the OCSP responder for the CA
Context	configure system security pki ca-profile <i>named-item</i> ocsp responder-url <i>http-optional-url-loose</i>
Tree	responder-url
String length	1 to 180
String format	'http-optional-url-loose' must be http:// or host-only, with optional port and path (e.g. http://hostname.domain/path)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

service-name *service-name*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure system security pki ca-profile <i>named-item</i> ocsp service-name <i>service-name</i>
Tree	service-name
String length	1 to 64

String format 'service-name' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transmission-profile *reference*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Transmission profile for the OCSP

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *named-item* [ocsp](#) **transmission-profile** *reference*

Tree [transmission-profile](#)

Reference **configure** [system](#) [transmission-profile](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

revocation-check *keyword*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Revocation method to check status of CA certificates

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *named-item* **revocation-check** *keyword*

Tree [revocation-check](#)

Description This command specifies the revocation method the system uses to check the revocation status of certificate issued by the CA.

Note: The **crl-optional** command option makes configuration of a valid CRL in a **ca-profile** optional. However, from a security point of view, it is important to always verify the revocation status of a certificate.

Options [crl](#), [crl-optional](#)

Default [crl](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

certificate-auto-update [[certificate-file-name](#)] *pki-file-name*

Synopsis	Enter the certificate-auto-update list instance
Context	configure system security pki certificate-auto-update <i>pki-file-name</i>
Tree	certificate-auto-update
Description	Commands in this context configure automatic certificate update associations.
Max. instances	256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[certificate-file-name] *pki-file-name*

Synopsis	Certificate file name
Context	configure system security pki certificate-auto-update <i>pki-file-name</i>
Tree	certificate-auto-update
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-file-name *pki-file-name*

Synopsis	Imported key filename
Context	configure system security pki certificate-auto-update <i>pki-file-name</i> key-file-name <i>pki-file-name</i>
Tree	key-file-name
String length	1 to 95
String format	'pki-file-name' must not be all spaces 'pki-file-name' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

profile *reference*

Synopsis	Certificate update profile name
Context	configure system security pki certificate-auto-update <i>pki-file-name</i> profile <i>reference</i>
Tree	profile
Reference	configure system security pki certificate-update-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate-display-format *keyword*

Synopsis	Display format for Certificates and CRLs
Context	configure system security pki certificate-display-format <i>keyword</i>
Tree	certificate-display-format
Options	ascii, utf8
Default	ascii
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate-expiration-warning

Synopsis	Enter the certificate-expiration-warning context
Context	configure system security pki certificate-expiration-warning
Tree	certificate-expiration-warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hours *number*

Synopsis	Time before system generates certificate warning trap
Context	configure system security pki certificate-expiration-warning hours <i>number</i>
Tree	hours
Range	0 to 8760
Units	hours
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

repeat-hours *number*

Synopsis Time system repeats certificate expiration warning trap

Context **configure** [system](#) [security](#) [pki](#) [certificate-expiration-warning](#) **repeat-hours** *number*

Tree [repeat-hours](#)

Range 0 to 8760

Units hours

Default 0

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

certificate-update-profile [[name](#)] *named-item*

Synopsis Enter the **certificate-update-profile** list instance

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *named-item*

Tree [certificate-update-profile](#)

Description Commands in this context configure a certificate update profile that specifies the behavior of the automatic update certificate.

Max. instances 256

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[name] *named-item*

Synopsis Certificate update profile name

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *named-item*

Tree [certificate-update-profile](#)

Description This command configures the certificate update profile name.

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

after-issue *number*

Synopsis Time for scheduler updates after certificate issuance

Context **configure** [system security pki certificate-update-profile](#) *named-item* [after-issue](#) *number*

Tree [after-issue](#)

Description This command configures the time for scheduler updates after the certificate issue time.

Range 864000 to 157680000

Units seconds

Notes The following elements are part of a choice: **after-issue** or **before-expiry**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

before-expiry *number*

Synopsis Time scheduler updates before certificate expiry

Context **configure** [system security pki certificate-update-profile](#) *named-item* [before-expiry](#) *number*

Tree [before-expiry](#)

Description This command configures the time that the scheduler updates before the certificate expiration time.

Range 3600 to 157680000

Units seconds

Default 86400

Notes The following elements are part of a choice: **after-issue** or **before-expiry**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

cmpv2

Synopsis Enter the **cmpv2** context

Context **configure** [system security pki certificate-update-profile](#) *named-item* [cmpv2](#)

Tree [cmpv2](#)

Notes The following elements are part of a choice: **cmpv2** or **est**.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile *reference*

Synopsis	CA profile name
Context	configure system security pki certificate-update-profile <i>named-item</i> cmpv2 ca-profile reference
Tree	ca-profile
Description	This command specifies the use of CMPv2 as the protocol to update the certificate. The CMPv2 configuration is derived from the referenced CA profile.
Reference	configure system security pki ca-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dsa

Synopsis	Enter the dsa context
Context	configure system security pki certificate-update-profile <i>named-item</i> dsa
Tree	dsa
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-size *number*

Synopsis	Length of the generated DSA key
Context	configure system security pki certificate-update-profile <i>named-item</i> dsa key-size number
Tree	key-size
Description	This command specifies that the newly generated key is an DSA key with the specified key length in bits.
Range	512 to 8192
Default	2048
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecdsa

Synopsis	Enter the ecdsa context
Context	configure system security pki certificate-update-profile <i>named-item</i> ecdsa
Tree	ecdsa
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

curve keyword

Synopsis	Elliptic curve to be used in ECDSA key generation
Context	configure system security pki certificate-update-profile <i>named-item</i> ecdsa curve <i>keyword</i>
Tree	curve
Description	This command specifies that the newly generated key is an ECDSA key with the specified curve.
Options	secp256r1, secp384r1, secp521r1
Default	secp256r1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est

Synopsis	Enter the est context
Context	configure system security pki certificate-update-profile <i>named-item</i> est
Tree	est
Notes	The following elements are part of a choice: cmpv2 or est .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est-profile reference

Synopsis	EST profile name
Context	configure system security pki certificate-update-profile <i>named-item</i> est est-profile <i>reference</i>

Tree	est-profile
Description	This command specifies the use of EST as the protocol to update the certificate. The EST configuration is derived from the referenced EST profile.
Reference	configure system security pki est-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hash-algorithm *keyword*

Synopsis	Hash algorithm for a certificate request
Context	configure system security pki certificate-update-profile <i>named-item</i> hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Description	This command specifies the hash algorithm used to generate a certificate request.
Options	md5, sha1, sha224, sha256, sha384, sha512
Default	sha256
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retry-interval *number*

Synopsis	Retry interval after a failed update
Context	configure system security pki certificate-update-profile <i>named-item</i> retry-interval <i>number</i>
Tree	retry-interval
Description	This command configures the retry interval after the update fails.
Range	60 to 36000
Units	seconds
Default	3600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsa

Synopsis	Enter the rsa context
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Context	configure system security pki certificate-update-profile <i>named-item</i> rsa
Tree	rsa
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-size *number*

Synopsis	Length of the generated RSA key
Context	configure system security pki certificate-update-profile <i>named-item</i> rsa key-size <i>number</i>
Tree	key-size
Description	This command specifies that the newly generated key is a RSA key with the specified key length in bits.
Range	512 to 8192
Default	2048
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

same-as-existing-key

Synopsis	Generate the new key to same type and key length
Context	configure system security pki certificate-update-profile <i>named-item</i> same-as-existing-key
Tree	same-as-existing-key
Description	When configured, this command specifies that the newly generated key is the same type and key length as the existing key.
Notes	The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

common-name-list [[cn-list-name](#)] *named-item*

Synopsis	Enter the common-name-list list instance
Context	configure system security pki common-name-list <i>named-item</i>
Tree	common-name-list

Max. instances	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cn-list-name] *named-item*

Synopsis	CN list name
Context	configure system security pki common-name-list <i>named-item</i>
Tree	common-name-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

common-name [[cn-index](#)] *number*

Synopsis	Enter the common-name list instance
Context	configure system security pki common-name-list <i>named-item</i> common-name <i>number</i>
Tree	common-name
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cn-index] *number*

Synopsis	Common name index
Context	configure system security pki common-name-list <i>named-item</i> common-name <i>number</i>
Tree	common-name
Range	1 to 128
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cn-type *keyword*

Synopsis	Common name type
Context	configure system security pki common-name-list <i>named-item</i> common-name <i>number</i> cn-type <i>keyword</i>
Tree	cn-type
Options	ip-address, domain-name
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cn-value *regular-expression-not-all-spaces*

Synopsis	Common name value
Context	configure system security pki common-name-list <i>named-item</i> common-name <i>number</i> cn-value <i>regular-expression-not-all-spaces</i>
Tree	cn-value
String length	1 to 255
String format	'regular-expression-not-all-spaces' must contain at least one non-space character
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

crl-expiration-warning

Synopsis	Enter the crl-expiration-warning context
Context	configure system security pki crl-expiration-warning
Tree	crl-expiration-warning
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hours *number*

Synopsis	Time before system generates CRL expiration warning trap
Context	configure system security pki crl-expiration-warning hours <i>number</i>

Tree	hours
Range	0 to 8760
Units	hours
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeat-hours *number*

Synopsis	Time system repeats CRL expiration warning trap
Context	configure system security pki crl-expiration-warning repeat-hours <i>number</i>
Tree	repeat-hours
Range	0 to 8760
Units	hours
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

dynamic-ca *boolean*

Synopsis	Enable the dynamic sub-CA support for IPsec
Context	configure system security pki dynamic-ca <i>boolean</i>
Tree	dynamic-ca
Description	When configured to true , the system may authenticate the IPsec peer using a certificate without provisioning the peer's sub-CAs locally, if the peer sends sub-CA certificates during IKEv2 exchanges.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

est-profile [[name](#)] *named-item*

Synopsis	Enter the est-profile list instance
Context	configure system security pki est-profile <i>named-item</i>
Tree	est-profile
Description	Commands in this context configure an Enrollment over Secure Transport (EST) profile.

Max. instances	128
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Enrollment over Secured Transport profile name
Context	configure system security pki est-profile <i>named-item</i>
Tree	est-profile
Description	This command configures the EST profile name.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

check-id-kp-cmcra-only *boolean*

Synopsis	Check id-kp-cmcra in the EST certificate
Context	configure system security pki est-profile <i>named-item</i> check-id-kp-cmcra-only <i>boolean</i>
Tree	check-id-kp-cmcra-only
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-tls-profile *named-item*

Synopsis	TLS client profile assigned to applications
Context	configure system security pki est-profile <i>named-item</i> client-tls-profile <i>named-item</i>
Tree	client-tls-profile
Description	This command specifies the TLS client profile to be assigned to applications for encryption. The profile creates the TLS connection to the EST server.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

http-authentication

Synopsis	Enter the http-authentication context
Context	configure system security pki est-profile <i>named-item</i> http-authentication
Tree	http-authentication
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *encrypted-leaf*

Synopsis	Password for EST authentication
Context	configure system security pki est-profile <i>named-item</i> http-authentication password <i>encrypted-leaf</i>
Tree	password
Description	This command specifies the password for EST authentication in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 166
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

username *string*

Synopsis	Username for the EST authentication
Context	configure system security pki est-profile <i>named-item</i> http-authentication username <i>string</i>
Tree	username
String length	1 to 32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server

Synopsis	Enter the server context
Context	configure system security pki est-profile <i>named-item</i> server
Tree	server
Description	Commands in this context configure EST server parameters.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

fqdn *fully-qualified-domain-name*

Synopsis	Fully Qualified Domain Name (FQDN) of the EST server
Context	configure system security pki est-profile <i>named-item</i> server fqdn <i>fully-qualified-domain-name</i>
Tree	fqdn
Description	This command specifies to use the FQDN of the EST server.
String length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 *ipv4-unicast-address*

Synopsis	IPv4 address of the EST server
Context	configure system security pki est-profile <i>named-item</i> server ipv4 <i>ipv4-unicast-address</i>
Tree	ipv4
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv6 address of the EST server
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Context	configure system security pki est-profile <i>named-item</i> server ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path

Synopsis	Enter the path context
Context	configure system security pki est-profile <i>named-item</i> server path
Tree	path
Description	Commands in this context configure URL paths for EST request messages.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

cacerts *string*

Synopsis	Server path to request CA certificates
Context	configure system security pki est-profile <i>named-item</i> server path cacerts <i>string</i>
Tree	cacerts
String length	1 to 255
String format	'cacerts' must start with / (e.g. /path)
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

simpleenroll *string*

Synopsis	Server path to request simple certificate enrollment
Context	configure system security pki est-profile <i>named-item</i> server path simpleenroll <i>string</i>
Tree	simpleenroll
String length	1 to 255
String format	'simpleenroll' must start with / (e.g. /path)
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

simplereenroll *string*

Synopsis	Server path for the reenrollment of clients
Context	configure system security pki est-profile <i>named-item</i> server path simplereenroll <i>string</i>
Tree	simplereenroll
String length	1 to 255
String format	'simplereenroll' must start with / (e.g. /path)
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

port *number*

Synopsis	Port number of the EST server
Context	configure system security pki est-profile <i>named-item</i> server port <i>number</i>
Tree	port
Range	1 to 65535
Default	443
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

transmission-profile *named-item*

Synopsis	Transmission profile name for EST
Context	configure system security pki est-profile <i>named-item</i> transmission-profile <i>named-item</i>
Tree	transmission-profile
Description	This command associates a file transmission profile to the EST profile. The transmission profile defines transport parameters for protocol such as HTTP, include routing instance, source address, timeout value, and so on.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

imported-format *keyword*

Synopsis	The supported encrypted file formats
Context	configure system security pki imported-format <i>keyword</i>
Tree	imported-format
Options	any, secure
Default	any
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-cert-chain-depth *number*

Synopsis	Maximum depth of certificate chain verification
Context	configure system security pki maximum-cert-chain-depth <i>number</i>
Tree	maximum-cert-chain-depth
Range	1 to 7
Default	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

python-script

Synopsis	Enter the python-script context
Context	configure system security python-script
Tree	python-script
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authorization

Synopsis	Enter the authorization context
Context	configure system security python-script authorization
Tree	authorization
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cron

Synopsis	Enter the cron context
Context	configure system security python-script authorization cron
Tree	cron
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-user *reference*

Synopsis	User profile name when executing a Python application
Context	configure system security python-script authorization cron cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-handler

Synopsis	Enter the event-handler context
Context	configure system security python-script authorization event-handler
Tree	event-handler
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-user *reference*

Synopsis	User profile name when executing a Python application
Context	configure system security python-script authorization event-handler cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure system security python-script authorization subscriber-mgmt
Tree	subscriber-mgmt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cli-user *reference*

Synopsis	User profile name when executing a Python application
Context	configure system security python-script authorization subscriber-mgmt cli-user <i>reference</i>
Tree	cli-user
Reference	configure system security user-params local-user user <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp

Synopsis	Enter the snmp context
Context	configure system security snmp
Tree	snmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access [[group](#)] *named-item* [context](#) *named-item-or-empty* [security-model](#) *keyword* [security-level](#) *keyword*

Synopsis	Enter the access list instance
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i>
Tree	access
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[group] *named-item*

Synopsis	Group name
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i>
Tree	access
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

context *named-item-or-empty*

Synopsis	String to match context name for access rights
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i>
Tree	access
String length	0 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security-model *keyword*

Synopsis	Security model
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i>
Tree	access
Options	snmpv1, snmpv2c, usm
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

security-level keyword

Synopsis	Minimum security level required to gain access rights
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i>
Tree	access
Options	no-auth-no-privacy, auth-no-privacy, privacy
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

notify named-item

Synopsis	SNMP view for notification access
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i> notify <i>named-item</i>
Tree	notify
Description	This command specifies the SNMP view used to control which MIB objects can be accessed for notifications.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix-match keyword

Synopsis	Match type for the context
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i> prefix-match <i>keyword</i>
Tree	prefix-match
Options	exact, prefix
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

read *named-item*

Synopsis	SNMP view for read access
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i> read <i>named-item</i>
Tree	read
Description	This command specifies the SNMP view used to control which MIB objects can be accessed using a read (get) operation.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

write *named-item*

Synopsis	SNMP view for write access
Context	configure system security snmp access <i>named-item</i> context <i>named-item-or-empty</i> security-model <i>keyword</i> security-level <i>keyword</i> write <i>named-item</i>
Tree	write
Description	This command specifies the SNMP view used to control which MIB objects can be accessed using a write (set) operation.
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

attempts

Synopsis	Enter the attempts context
Context	configure system security snmp attempts
Tree	attempts
Description	Commands in this context configure settings for SNMPv2 or SNMPv3 connection attempts. The command settings are used to counter Denial of Service (DOS) attacks through SNMP. If the threshold is exceeded, the host is locked out for the lockout time period.
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

count *number*

Synopsis Unsuccessful attempts allowed within time period

Context **configure** [system security snmp attempts count](#) *number*

Tree [count](#)

Range 1 to 64

Default 20

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

lockout *number*

Synopsis Lockout period during which the host cannot log in

Context **configure** [system security snmp attempts lockout](#) *number*

Tree [lockout](#)

Description This command configures the time period during which the host cannot log in. When the host exceeds the attempted counts setting, the host is locked out from further login attempts for the configured time period.

Range 0 to 1440

Units minutes

Default 10

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

time *number*

Synopsis Time before host lockout after unsuccessful attempts

Context **configure** [system security snmp attempts time](#) *number*

Tree [time](#)

Range 0 to 60

Units minutes

Default 5

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

community [[community-string](#)] *encrypted-leaf*

Synopsis Enter the **community** list instance

Context **configure** [system](#) [security snmp community](#) *encrypted-leaf*

Tree [community](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[community-string] *encrypted-leaf*

Synopsis SNMPv1 or SNMPv2c community string

Context **configure** [system](#) [security snmp community](#) *encrypted-leaf*

Tree [community](#)

Description This command specifies the SNMPv1 or SNMPv2c community string in a protected format.

The specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 166

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

access-permissions *keyword*

Synopsis Access permissions for objects in the MIB

Context **configure** [system](#) [security snmp community](#) *encrypted-leaf* [access-permissions](#) *keyword*

Tree [access-permissions](#)

Options r, rw, rwa, mgmt, vpls-mgmt

Notes This element is mandatory.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

source-access-list *reference*

Synopsis	Source access list to validate received SNMP requests
Context	configure system security snmp community <i>encrypted-leaf</i> source-access-list <i>reference</i>
Tree	source-access-list
Reference	configure system security snmp source-access-list <i>string-not-all-spaces</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *keyword*

Synopsis	SNMP version
Context	configure system security snmp community <i>encrypted-leaf</i> version <i>keyword</i>
Tree	version
Options	v1, v2c, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-access-list [[list-name](#)] *string-not-all-spaces*

Synopsis	Enter the source-access-list list instance
Context	configure system security snmp source-access-list <i>string-not-all-spaces</i>
Tree	source-access-list
Description	Commands in this context configure SNMP source access lists. SNMP source access lists are used to validate the source IP address of received SNMP requests. Multiple community (VPRN or Base router) and USM community instances can reference the same SNMP source access list.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[list-name] *string-not-all-spaces*

Synopsis	Source access list name
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Context	configure system security snmp source-access-list <i>string-not-all-spaces</i>
Tree	source-access-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character 'list-name' must start with a letter (e.g. myList)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-host [[host-name](#)] *named-item*

Synopsis	Enter the source-host list instance
Context	configure system security snmp source-access-list <i>string-not-all-spaces</i> source-host <i>named-item</i>
Tree	source-host
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[host-name] *named-item*

Synopsis	Source host entry name
Context	configure system security snmp source-access-list <i>string-not-all-spaces</i> source-host <i>named-item</i>
Tree	source-host
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address entry used to validate SNMP requests
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Context	configure system security snmp source-access-list <i>string-not-all-spaces</i> source-host <i>named-item</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

usm-community [[community-string](#)] *encrypted-leaf*

Synopsis	Enter the usm-community list instance
Context	configure system security snmp usm-community <i>encrypted-leaf</i>
Tree	usm-community
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[community-string] *encrypted-leaf*

Synopsis	Community string associated with SNMPv3 access group
Context	configure system security snmp usm-community <i>encrypted-leaf</i>
Tree	usm-community
Description	<p>This command specifies the community string associated with SNMPv3 access group in a protected format.</p> <p>The specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 166
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group *named-item*

Synopsis	Group to manage access rights of the community string
Context	configure system security snmp usm-community <i>encrypted-leaf</i> group <i>named-item</i>
Tree	group
String length	1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

source-access-list *reference*

Synopsis Source access list to validate received SNMP requests

Context **configure** [system](#) [security snmp](#) [usm-community](#) *encrypted-leaf* [source-access-list](#) *reference*

Tree [source-access-list](#)

Reference **configure** [system](#) [security snmp](#) [source-access-list](#) *string-not-all-spaces*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

view [[view-name](#)] *named-item subtree string*

Synopsis Enter the **view** list instance

Context **configure** [system](#) [security snmp](#) [view](#) *named-item subtree string*

Tree [view](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[view-name] *named-item*

Synopsis View name

Context **configure** [system](#) [security snmp](#) [view](#) *named-item subtree string*

Tree [view](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

subtree string

Synopsis	Object Identifier (OID) value
Context	configure system security snmp view <i>named-item</i> subtree <i>string</i>
Tree	view
String length	1 to 256
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mask string

Synopsis	Mask value as binary value, or hex value
Context	configure system security snmp view <i>named-item</i> subtree <i>string</i> mask <i>string</i>
Tree	mask
String length	1 to 16
String format	'mask' must be even-length hex (e.g. 0a1b)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Type of SNMP security view mask
Context	configure system security snmp view <i>named-item</i> subtree <i>string</i> type <i>keyword</i>
Tree	type
Options	included, excluded
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

source-address

Synopsis	Enter the source-address context
Context	configure system security source-address
Tree	source-address

Description	<p>Commands in this context configure the IP source address that is used in all unsolicited packets sent by the specified applications.</p> <p>This configuration applies to packets transmitted in-band (for example, a network port on an IOM) and does not apply to packets transmitted out-of-band on the management interface on the CPM Ethernet port. Packets transmitted using the CPM Ethernet port use the address of the CPM Ethernet port as the IP source address in the packet.</p> <p>When a source address is specified for the PTP application, the port-based 1588 hardware timestamping assist function is applied to PTP packets matching the IPv4 address of the router interface used to ingress the IP address specified in this command. If the IP address is removed, the port-based 1588 hardware timestamping assist function is only applied to PTP packets matching the IPv4 address of the router interface.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4 [[application](#)] *keyword*

Synopsis	Enter the ipv4 list instance
Context	configure system security source-address ipv4 <i>keyword</i>
Tree	ipv4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[application] *keyword*

Synopsis	Application that sets the source IPv4 address
Context	configure system security source-address ipv4 <i>keyword</i>
Tree	ipv4
Options	telnet – Telnet packets ftp – FTP packets ssh – SSH packets radius – RADIUS packets tacplus – TACACS+ packets snmptrap – SNMP trap packets syslog – Syslog packets ping – ICMP Echo Reply messages traceroute – Traceroute reply messages dns – DNS packets sntp – SNTP packets ntp – NTP packets cflowd – Cflowd packets ptp – PTP packets

	mcreporter – IGMP Host Report messages
	sflow – Sflow packets
	icmp-error – ICMP error messages
	ldap – LDAP packets
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv4-address*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 source address for the application
Context	configure system security source-address ipv4 <i>keyword</i> address <i>ipv4-address</i>
Tree	address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	configure system security source-address ipv4 <i>keyword</i> interface-name <i>interface-name</i>
Tree	interface-name
String length	1 to 32
Notes	The following elements are part of a mandatory choice: address or interface-name .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6 [[application](#)] *keyword*

Synopsis	Enter the ipv6 list instance
Context	configure system security source-address ipv6 <i>keyword</i>
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[application] *keyword*

Synopsis	Application that sets the source IPv6 address
Context	configure system security source-address ipv6 <i>keyword</i>
Tree	ipv6
Options	telnet – Telnet packets ftp – FTP packets radius – RADIUS packets tacplus – TACACS+ packets snmptrap – SNMP trap packets syslog – Syslog packets ping – ICMPv6 Echo Reply messages traceroute – Traceroute reply messages dns – DNS packets cflowd – Cflowd packets ntp – NTP packets sflow – Sflow packets icmp6-error – ICMPv6 error messages ldap – LDAP packets ssh – SSH packets ptp – PTP packets
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

address *ipv6-address***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 source address for the application
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Context	configure system security source-address ipv6 <i>keyword</i> address <i>ipv6-address</i>
Tree	address
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ssh

Synopsis	Enter the ssh context
Context	configure system security ssh
Tree	ssh
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-method

Synopsis	Enter the authentication-method context
Context	configure system security ssh authentication-method
Tree	authentication-method
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client

Synopsis	Enter the client context
Context	configure system security ssh authentication-method client
Tree	client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

public-key-only *boolean*

Synopsis	Accept only public-key authentication for SSH session
Context	configure system security ssh authentication-method client public-key-only <i>boolean</i>
Tree	public-key-only

Description	<p>When configured to true, the system accepts only public key client authentication for the SSH server.</p> <p>This command defines the authentication method at the system level.</p> <p>When configured to false, the system accepts public key or password client authentication. If interactive-authentication is configured to true in the configure system security aaa remote-servers radius or configure system security aaa remote-servers tacplus context, the system also accepts interactive keyboard authentication.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server

Synopsis	Enter the server context
Context	configure system security ssh authentication-method server
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

public-key-only *boolean*

Synopsis	Accept only public-key authentication for SSH session
Context	configure system security ssh authentication-method server public-key-only boolean
Tree	public-key-only
Description	<p>When configured to true, the system accepts only public key client authentication for the SSH server.</p> <p>This command defines the authentication method at the system level.</p> <p>When configured to false, the system accepts public key or password client authentication. If interactive-authentication is configured to true in the configure system security aaa remote-servers radius or configure system security aaa remote-servers tacplus context, the system also accepts interactive keyboard authentication.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-cipher-list-v2

Synopsis	Enter the client-cipher-list-v2 context
Context	configure system security ssh client-cipher-list-v2
Tree	client-cipher-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cipher [[index](#)] *number*

Synopsis	Enter the cipher list instance
Context	configure system security ssh client-cipher-list-v2 cipher <i>number</i>
Tree	cipher
Description	Commands in this context configure a client-cipher instance. Client-ciphers are used when the SR OS is acting as an SSH client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[index](#)] *number*

Synopsis	Cipher index in the list
Context	configure system security ssh client-cipher-list-v2 cipher <i>number</i>
Tree	cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Algorithm for performing encryption or decryption
Context	configure system security ssh client-cipher-list-v2 cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr, aes256-gcm-openssh-com

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-host-key-list-v2

Synopsis	Enter the client-host-key-list-v2 context
Context	configure system security ssh client-host-key-list-v2
Tree	client-host-key-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-key [[index](#)] *number*

Synopsis	Enter the host-key list instance
Context	configure system security ssh client-host-key-list-v2 host-key <i>number</i>
Tree	host-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[index](#)] *number*

Synopsis	SSHv2 host key algorithm index
Context	configure system security ssh client-host-key-list-v2 host-key <i>number</i>
Tree	host-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Host key algorithm for computing a signature
Context	configure system security ssh client-host-key-list-v2 host-key <i>number</i> name <i>keyword</i>
Tree	name

Options	ssh-rsa, rsa-sha2-256, rsa-sha2-512, ecdsa-sha2-nistp256, ecdsa-sha2-nistp384, ecdsa-sha2-nistp521, ssh-ed25519
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-kex-list-v2

Synopsis	Enter the client-kex-list-v2 context
Context	configure system security ssh client-kex-list-v2
Tree	client-kex-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kex [[index](#)] *number*

Synopsis	Enter the kex list instance
Context	configure system security ssh client-kex-list-v2 kex <i>number</i>
Tree	kex
Description	<p>Commands in this context configure SSH KEX algorithms for SR OS as a client.</p> <p>If a list is configured, SSH uses the user-configured list with the lowest index algorithm having the highest priority, and so on.</p> <p>By default, the client list is empty. When the list is unconfigured, SSH uses the default list hard-coded in SR OS which contains the following algorithms:</p> <ul style="list-style-type: none"> • mlkem768x25519-sha256 • ecdh-sha2-nistp512 • ecdh-sha2-nistp384 • ecdh-sha2-nistp256 • diffie-hellman-group16-sha512 • diffie-hellman-group14-sha256 • diffie-hellman-group14-sha1 • diffie-hellman-group-exchange-sha1 • diffie-hellman-group1-sha1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	SSHv2 KEX algorithm index
Context	configure system security ssh client-kex-list-v2 kex <i>number</i>
Tree	kex
Description	This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	KEX algorithm for computing a shared secret key
Context	configure system security ssh client-kex-list-v2 kex <i>number</i> name <i>keyword</i>
Tree	name
Options	diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512, ecdh-sha2-nistp256, ecdh-sha2-nistp384, ecdh-sha2-nistp521, mlkem768x25519-sha256
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-known-hosts

Synopsis	Enter the client-known-hosts context
Context	configure system security ssh client-known-hosts
Tree	client-known-hosts
Description	Commands in this context configure the static list of trusted SSH host public keys that SR OS accepts when acting as the SSH client. SR OS supports configuring multiple static host public keys for a host. A mix of static and dynamically learned keys can be associated with a host for authentication.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

host-key [[index](#)] *number*

Synopsis	Enter the host-key list instance
Context	configure system security ssh client-known-hosts host-key <i>number</i>
Tree	host-key
Description	Commands in this context configure the host keys in the list of trusted host public keys.
Max. instances	32
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Host public key index number
Context	configure system security ssh client-known-hosts host-key <i>number</i>
Tree	host-key
Range	1 to 32
Notes	This element is part of a list key.
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security ssh client-known-hosts host-key <i>number</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

host-name (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	IP address or FQDN of the host
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Context	configure system security ssh client-known-hosts host-key <i>number</i> host-name (<i>ipv4-address-no-zone ipv6-address-no-zone fully-qualified-domain-name</i>)
Tree	host-name
String length	1 to 255
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

key-value *string-not-all-spaces*

Synopsis	Host public key value
Context	configure system security ssh client-known-hosts host-key <i>number</i> key-value <i>string-not-all-spaces</i>
Tree	key-value
String length	1 to 800
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.3.R1
Platforms	7705 SAR Gen 2

client-mac-list-v2

Synopsis	Enter the client-mac-list-v2 context
Context	configure system security ssh client-mac-list-v2
Tree	client-mac-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [[index](#)] *number*

Synopsis	Enter the mac list instance
Context	configure system security ssh client-mac-list-v2 mac <i>number</i>
Tree	mac
Description	Commands in this context configure SSH MAC algorithms for SR OS as a client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	MAC algorithm index
Context	configure system security ssh client-mac-list-v2 mac <i>number</i>
Tree	mac
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Algorithm for calculating message authentication code
Context	configure system security ssh client-mac-list-v2 mac <i>number</i> name <i>keyword</i>
Tree	name
Options	hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-re-exchange

Synopsis	Enter the key-re-exchange context
Context	configure system security ssh key-re-exchange
Tree	key-re-exchange
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client

Synopsis	Enter the client context
Context	configure system security ssh key-re-exchange client
Tree	client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the key re-exchange
Context	configure system security ssh key-re-exchange client admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbytes (*number* | *keyword*)

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	configure system security ssh key-re-exchange client mbytes (<i>number</i> <i>keyword</i>)
Tree	mbytes
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minutes (*number* | *keyword*)

Synopsis	Maximum time before key re-exchange is initiated
Context	configure system security ssh key-re-exchange client minutes (<i>number</i> <i>keyword</i>)
Tree	minutes
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server

Synopsis	Enter the server context
Context	configure system security ssh key-re-exchange server
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the key re-exchange
Context	configure system security ssh key-re-exchange server admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mbytes (*number* | *keyword*)

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	configure system security ssh key-re-exchange server mbytes (<i>number</i> <i>keyword</i>)
Tree	mbytes
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minutes (*number* | *keyword*)

Synopsis	Maximum time before key re-exchange is initiated
Context	configure system security ssh key-re-exchange server minutes (<i>number</i> <i>keyword</i>)
Tree	minutes

Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

listening-port *number*

Synopsis	TCP port for SSH connections for VPRN or base routing
Context	configure system security ssh listening-port <i>number</i>
Tree	listening-port
Range	22 1024 to 49151
Default	22
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

permit-empty-passwords *boolean*

Synopsis	Permit users with empty password strings to log in
Context	configure system security ssh permit-empty-passwords <i>boolean</i>
Tree	permit-empty-passwords
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

preserve-key *boolean*

Synopsis	Preserve keys and restore on system or server restart
Context	configure system security ssh preserve-key <i>boolean</i>
Tree	preserve-key
Description	<p>When configured to true, private, public, and host keys are saved by the server. The keys are restored following a system reboot or a restart of an SSH server.</p> <p>When configured to false, the keys are held in memory by an SSH server but are not restored following a system reboot.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-admin-state *keyword*

Synopsis	Administrative state of the SSH server
Context	configure system security ssh server-admin-state <i>keyword</i>
Tree	server-admin-state
Options	enable, disable
Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-cipher-list-v2

Synopsis	Enter the server-cipher-list-v2 context
Context	configure system security ssh server-cipher-list-v2
Tree	server-cipher-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cipher [[index](#)] *number*

Synopsis	Enter the cipher list instance
Context	configure system security ssh server-cipher-list-v2 cipher <i>number</i>
Tree	cipher
Description	Commands in this context configure a server-cipher instance. Server-ciphers are used when SR OS is acting as an SSH server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Cipher index in the list
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Context	configure system security ssh server-cipher-list-v2 cipher <i>number</i>
Tree	cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Algorithm for performing encryption or decryption
Context	configure system security ssh server-cipher-list-v2 cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr, aes256-gcm-openssh-com
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-host-key-list-v2

Synopsis	Enter the server-host-key-list-v2 context
Context	configure system security ssh server-host-key-list-v2
Tree	server-host-key-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

host-key [[index](#)] *number*

Synopsis	Enter the host-key list instance
Context	configure system security ssh server-host-key-list-v2 host-key <i>number</i>
Tree	host-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	SSHv2 host key algorithm index
Context	configure system security ssh server-host-key-list-v2 host-key <i>number</i>
Tree	host-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Host key algorithm for computing a signature
Context	configure system security ssh server-host-key-list-v2 host-key <i>number</i> name <i>keyword</i>
Tree	name
Options	ssh-rsa, rsa-sha2-256, rsa-sha2-512, ecdsa-sha2-nistp256, ecdsa-sha2-nistp384, ecdsa-sha2-nistp521, ssh-ed25519
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-kex-list-v2

Synopsis	Enter the server-kex-list-v2 context
Context	configure system security ssh server-kex-list-v2
Tree	server-kex-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kex [index] *number*

Synopsis	Enter the kex list instance
Context	configure system security ssh server-kex-list-v2 kex <i>number</i>
Tree	kex
Description	Commands in this context configure SSH KEX algorithms for SR OS as a server.

If a list is configured, SSH uses the user-configured list with the lowest index algorithm having the highest priority, and so on.

By default, the server list is empty. When the list is unconfigured, SSH uses the default list hard-coded in SR OS, which contains the following algorithms:

- mlkem768x25519-sha256
- ecdh-sha2-nistp512
- ecdh-sha2-nistp384
- ecdh-sha2-nistp256
- diffie-hellman-group16-sha512
- diffie-hellman-group14-sha256
- diffie-hellman-group14-sha1
- diffie-hellman-group-exchange-sha1
- diffie-hellman-group1-sha1

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[index] *number*

Synopsis SSHv2 KEX algorithm index

Context **configure** [system](#) [security](#) [ssh](#) [server-kex-list-v2](#) [kex](#) *number*

Tree [kex](#)

Description This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.

Range 1 to 255

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

name *keyword*

Synopsis KEX algorithm for computing a shared secret key

Context **configure** [system](#) [security](#) [ssh](#) [server-kex-list-v2](#) [kex](#) *number* [name](#) *keyword*

Tree [name](#)

Options diffie-hellman-group1-sha1, diffie-hellman-group14-sha1,
diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256,

	diffie-hellman-group16-sha512, ecdh-sha2-nistp256, ecdh-sha2-nistp384, ecdh-sha2-nistp521, mlkem768x25519-sha256
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-mac-list-v2

Synopsis	Enter the server-mac-list-v2 context
Context	configure system security ssh server-mac-list-v2
Tree	server-mac-list-v2
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mac [\[index\]](#) *number*

Synopsis	Enter the mac list instance
Context	configure system security ssh server-mac-list-v2 mac <i>number</i>
Tree	mac
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	MAC algorithm index
Context	configure system security ssh server-mac-list-v2 mac <i>number</i>
Tree	mac
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Algorithm for calculating message authentication code
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Context	configure system security ssh server-mac-list-v2 mac <i>number</i> name <i>keyword</i>
Tree	name
Options	hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

system-passwords

Synopsis	Enter the system-passwords context
Context	configure system security system-passwords
Tree	system-passwords
Description	This command enters the context to configure system passwords.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-password *hashed-leaf*

Synopsis	Administrative password for the enable command
Context	configure system security system-passwords admin-password <i>hashed-leaf</i>
Tree	admin-password
Description	<p>This command allows a user with administrative permissions to configure a password that enables a user to become an administrator.</p> <p>This password is valid only for one session. When enabled, no authorization to TACACS + or RADIUS is performed and the user is locally regarded as an administrative user.</p> <p>If the admin-password is configured in the configure system security system-passwords admin-password context, any user can enter the special mode by entering the enable command.</p> <p>enable is in the default profile. By default, all users are given access to this command.</p> <p>After the enable command is entered, the user is prompted for a password. If the password matches, the user is given unrestricted access to all commands.</p> <p>The minimum length of the password is determined by the minimum-length command. The complexity requirements for the password are determined by the complexity command.</p> <p>Note: This command applies to a local user, in addition to users on RADIUS, TACACS, and LDAP.</p> <p>(none)</p>

String length	3 to 136
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tech-support

Synopsis	Enter the tech-support context
Context	configure system security tech-support
Tree	tech-support
Description	Commands in this context configure the default file location for technical support file generation.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ts-location (*ts-sat-url* | *cflash-url* | *string*)

Synopsis	Default file path for generated tech-support files
Context	configure system security tech-support ts-location (<i>ts-sat-url</i> <i>cflash-url</i> <i>string</i>)
Tree	ts-location
Description	<p>This command configures the directory where technical support files are saved when no file URL is specified with the admin tech-support command. When no directory is configured, the user must specify a file URL with the admin tech-support command.</p> <p>The directory specified must be manually created by the administrator.</p> <p>See the admin tech-support command for more details about the filename generated by the system.</p>
String length	1 to 180
String format	<p>'ts-sat-url' must start with sat: (e.g. sat:path/to/file)</p> <p>'cflash-url' must start with cf1-4, optional slot A-D, then path (e.g. cf1:/path or cf1-A:/path)</p> <p>'cflash-url' must have each path segment at most 99 characters</p> <p>'ts-url-string' must contain at least one non-space character</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet

Synopsis	Enter the telnet context
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Context	configure system security telnet
Tree	telnet
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

listening-port *number*

Synopsis	TCP port for Telnet connections for VPRN or base routing
Context	configure system security telnet listening-port <i>number</i>
Tree	listening-port
Range	23 1024 to 49151
Default	23
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet-server *boolean*

Synopsis	Enable Telnet servers running on the system
Context	configure system security telnet-server <i>boolean</i>
Tree	telnet-server
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telnet6-server *boolean*

Synopsis	Enable Telnet IPv6 servers running on the system
Context	configure system security telnet6-server <i>boolean</i>
Tree	telnet6-server
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls

Synopsis	Enter the tls context
Context	configure system security tls
Tree	tls
Description	Commands in this context configure TLS command options.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-profile [[cert-profile-name](#)] *named-item*

Synopsis	Enter the cert-profile list instance
Context	configure system security tls cert-profile <i>named-item</i>
Tree	cert-profile
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[cert-profile-name](#)] *named-item*

Synopsis	TLS certificate profile name
Context	configure system security tls cert-profile <i>named-item</i>
Tree	cert-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the certificate profile
Context	configure system security tls cert-profile <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i>
Tree	entry
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[entry-id] *number*

Synopsis	Certificate profile ID
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i>
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

certificate-file *string-not-all-spaces*

Synopsis	Certificate file name
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i> certificate-file <i>string-not-all-spaces</i>
Tree	certificate-file
String length	1 to 95
String format	'string-not-all-spaces' must contain at least one non-space character 'certificate-file' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-file *string-not-all-spaces*

Synopsis	Key file name
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i> key-file <i>string-not-all-spaces</i>
Tree	key-file
String length	1 to 95
String format	'string-not-all-spaces' must contain at least one non-space character 'key-file' must not contain : or / (filename only)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

send-chain

Synopsis	Enter the send-chain context
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i> send-chain
Tree	send-chain
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ca-profile [[ca-profile-name](#)] *reference*

Synopsis	Add a list entry for ca-profile
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i> send-chain ca-profile <i>reference</i>
Tree	ca-profile
Max. instances	7
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-profile-name] *reference*

Synopsis	CA profile name
Context	configure system security tls cert-profile <i>named-item</i> entry <i>number</i> send-chain ca-profile <i>reference</i>
Tree	ca-profile

Reference	configure system security pki ca-profile <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-cipher-list [[client-cipher-list-name](#)] *named-item*

Synopsis	Enter the client-cipher-list list instance
Context	configure system security tls client-cipher-list <i>named-item</i>
Tree	client-cipher-list
Description	Commands in this context create a cipher list the client sends to the server in the client Hello message. It consists of a list of ciphers supported and preferred by SR OS for use in the TLS session. The server matches this client list against the server cipher list. The most preferred cipher found in both lists is chosen.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[client-cipher-list-name] *named-item*

Synopsis	Client cipher list name
Context	configure system security tls client-cipher-list <i>named-item</i>
Tree	client-cipher-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls12-cipher [[index](#)] *number*

Synopsis	Enter the tls12-cipher list instance
Context	configure system security tls client-cipher-list <i>named-item</i> tls12-cipher <i>number</i>
Tree	tls12-cipher

Description	Commands in this context configure the cipher suite that is negotiated by the server and client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index of the cipher
Context	configure system security tls client-cipher-list <i>named-item</i> tls12-cipher <i>number</i>
Tree	tls12-cipher
Description	This command configures the index number of the cipher. The index number provides the location of the cipher in the negotiation list; the lower index numbers are higher in the list, and the higher index numbers are lower in the list.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Cipher suite code
Context	configure system security tls client-cipher-list <i>named-item</i> tls12-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384, tls-ecdhc-ecdsa-aes128-gcm-sha256, tls-ecdhc-ecdsa-aes256-gcm-sha384, tls-ecdhc-rsa-aes128-gcm-sha256, tls-ecdhc-rsa-aes256-gcm-sha384
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls13-cipher [index] *number*

Synopsis	Enter the tls13-cipher list instance
Context	configure system security tls client-cipher-list <i>named-item</i> tls13-cipher <i>number</i>

Tree	tls13-cipher
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index number of the TLS 1.3 cipher
Context	configure system security tls client-cipher-list <i>named-item</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	configure system security tls client-cipher-list <i>named-item</i> tls13-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-aes128-gcm-sha256 , tls-aes256-gcm-sha384 , tls-chacha20-poly1305-sha256 , tls-aes128-ccm-sha256
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-group-list [[client-group-list-name](#)] *named-item*

Synopsis	Enter the client-group-list list instance
Context	configure system security tls client-group-list <i>named-item</i>
Tree	client-group-list
Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the client sends in a client Hello message.
Max. instances	16

Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[client-group-list-name] *named-item*

Synopsis Name of the TLS client group list
 Context **configure** [system](#) [security](#) [tls](#) [client-group-list](#) *named-item*
 Tree [client-group-list](#)
 String length 1 to 32
 String format 'string-not-all-spaces' must contain at least one non-space character
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

tls13-group [[index](#)] *number*

Synopsis Enter the **tls13-group** list instance
 Context **configure** [system](#) [security](#) [tls](#) [client-group-list](#) *named-item* [tls13-group](#) *number*
 Tree [tls13-group](#)
 Description Commands in this context configure the TLS 1.3-supported group suite codes sent by the client in its Hello messages.
 SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

[[index](#)] *number*

Synopsis Index number of the TLS 1.3 group
 Context **configure** [system](#) [security](#) [tls](#) [client-group-list](#) *named-item* [tls13-group](#) *number*
 Tree [tls13-group](#)
 Range 1 to 255
 Notes This element is part of a list key.
 Introduced 25.3.R2
 Platforms 7705 SAR Gen 2

name *keyword*

Synopsis	Name of the TLS 1.3 group suite code
Context	configure system security tls client-group-list <i>named-item</i> tls13-group <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-ecdhe-256 , tls-ecdhe-384 , tls-ecdhe-521 , tls-x25519 , tls-x448 , tls-ml-kem1024
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-signature-list [[client-signature-list-name](#)] *named-item*

Synopsis	Enter the client-signature-list list instance
Context	configure system security tls client-signature-list <i>named-item</i>
Tree	client-signature-list
Description	Commands in this context configure the list of TLS 1.3-supported signature suite codes that the client sends in a client Hello message.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[client-signature-list-name] *named-item*

Synopsis	Name of the TLS 1.3 client signature list
Context	configure system security tls client-signature-list <i>named-item</i>
Tree	client-signature-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls13-signature [[index](#)] *number*

Synopsis	Enter the tls13-signature list instance
Context	configure system security tls client-signature-list <i>named-item</i> tls13-signature <i>number</i>
Tree	tls13-signature
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the client in its Hello messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index number of the TLS 1.3 signature
Context	configure system security tls client-signature-list <i>named-item</i> tls13-signature <i>number</i>
Tree	tls13-signature
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	configure system security tls client-signature-list <i>named-item</i> tls13-signature <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-eccdsa-secp256r1-sha256, tls-eccdsa-secp384r1-sha384, tls-eccdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512, tls-ml-dsa87
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

client-tls-profile [[client-profile-name](#)] *named-item*

Synopsis	Enter the client-tls-profile list instance
Context	configure system security tls client-tls-profile <i>named-item</i>
Tree	client-tls-profile
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[client-profile-name] *named-item*

Synopsis	Client TLS profile name
Context	configure system security tls client-tls-profile <i>named-item</i>
Tree	client-tls-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the client TLS profile
Context	configure system security tls client-tls-profile <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-profile *reference*

Synopsis	Certificate profile ID
Context	configure system security tls client-tls-profile <i>named-item</i> cert-profile <i>reference</i>

Tree	cert-profile
Reference	configure system security tls cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cipher-list *reference*

Synopsis	Cipher list for negotiation in the client Hello message
Context	configure system security tls client-tls-profile <i>named-item</i> cipher-list <i>reference</i>
Tree	cipher-list
Reference	configure system security tls client-cipher-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-list *reference*

Synopsis	Name of the list of supported group suite codes
Context	configure system security tls client-tls-profile <i>named-item</i> group-list <i>reference</i>
Tree	group-list
Description	This command assigns an existing TLS 1.3 group list to the TLS client profile.
Reference	configure system security tls client-group-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-version *keyword*

Synopsis	TLS protocol version used by the TLS client profile
Context	configure system security tls client-tls-profile <i>named-item</i> protocol-version <i>keyword</i>
Tree	protocol-version
Description	<p>This command configures the TLS version to be negotiated between the client and the server.</p> <p>The client adds the specified version as a supported version in its Hello message to the server.</p>
Options	tls-version-all , tls-version-12 , tls-version-13
Default	tls-version-12

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signature-list *reference*

Synopsis	Name of the list of supported signature suite codes
Context	configure system security tls client-tls-profile <i>named-item</i> signature-list <i>reference</i>
Tree	signature-list
Description	This command assigns an existing TLS 1.3 signature list to the TLS client profile.
Reference	configure system security tls client-signature-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

status-verify

Synopsis	Enter the status-verify context
Context	configure system security tls client-tls-profile <i>named-item</i> status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification options for the end-entity certificate in a TLS client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-result *keyword*

Synopsis	Default result of certificate status verification
Context	configure system security tls client-tls-profile <i>named-item</i> status-verify default-result <i>keyword</i>
Tree	default-result
Description	<p>This command configures the default result of the entity certificate verification in the TLS client profile. This command overwrites the EE certificate revocation verification for the TLS client profile.</p> <p>By default the router checks the certification revocation status, but if this command is set to good, the end-entity certificate revocation status is overwritten and a good revocation status is returned for the EE certificate.</p> <p>If this command is set to revoked, the router returns the actual revocation status of the end-entity certificate.</p>

Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ee-revocation

Synopsis	Enter the ee-revocation context
Context	configure system security tls client-tls-profile <i>named-item</i> status-verify ee-revocation
Tree	ee-revocation
Description	Commands in this context configure the methods used to verify the end entity certificate revocation status for the TLS client profile.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary *keyword*

Synopsis	Primary method used to verify certificate revocation
Context	configure system security tls client-tls-profile <i>named-item</i> status-verify ee-revocation primary <i>keyword</i>
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure system security tls client-tls-profile <i>named-item</i> status-verify ee-revocation secondary <i>keyword</i>
Tree	secondary
Options	none, crl, ocsp
Default	none
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

trust-anchor-profile *reference*

Synopsis Trust anchor profile

Context **configure** [system security tls client-tls-profile](#) *named-item* **trust-anchor-profile** *reference*

Tree [trust-anchor-profile](#)

Reference **configure** [system security tls trust-anchor-profile](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

server-cipher-list [[server-cipher-list-name](#)] *named-item*

Synopsis Enter the **server-cipher-list** list instance

Context **configure** [system security tls server-cipher-list](#) *named-item*

Tree [server-cipher-list](#)

Description Commands in this context create a cipher list the server sends to the client in the Hello message. It consists of a list of ciphers supported and preferred by SR OS for use in the TLS session.

Max. instances 16

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[server-cipher-list-name] *named-item*

Synopsis Server cipher list name

Context **configure** [system security tls server-cipher-list](#) *named-item*

Tree [server-cipher-list](#)

String length 1 to 32

String format 'string-not-all-spaces' must contain at least one non-space character

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

tls12-cipher [[index](#)] *number*

Synopsis	Enter the tls12-cipher list instance
Context	configure system security tls server-cipher-list <i>named-item</i> tls12-cipher <i>number</i>
Tree	tls12-cipher
Description	Commands in this context configure the cipher suite list that is negotiated by the server and client.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index of the cipher
Context	configure system security tls server-cipher-list <i>named-item</i> tls12-cipher <i>number</i>
Tree	tls12-cipher
Description	This command configures the index number of the cipher. The index number provides the location of the cipher in the negotiation list; the lower index numbers are higher in the list, and the higher index numbers are lower in the list.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Cipher suite code
Context	configure system security tls server-cipher-list <i>named-item</i> tls12-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384, tls-ecdhc-ecdsa-aes128-gcm-sha256, tls-ecdhc-ecdsa-aes256-gcm-sha384, tls-ecdhc-rsa-aes128-gcm-sha256, tls-ecdhc-rsa-aes256-gcm-sha384
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls13-cipher [[index](#)] *number*

Synopsis	Enter the tls13-cipher list instance
Context	configure system security tls server-cipher-list <i>named-item</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index number of the TLS 1.3 cipher
Context	configure system security tls server-cipher-list <i>named-item</i> tls13-cipher <i>number</i>
Tree	tls13-cipher
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	configure system security tls server-cipher-list <i>named-item</i> tls13-cipher <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-aes128-gcm-sha256, tls-aes256-gcm-sha384, tls-chacha20-poly1305-sha256, tls-aes128-ccm-sha256
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-group-list [[server-group-list-name](#)] *named-item*

Synopsis	Enter the server-group-list list instance
Context	configure system security tls server-group-list <i>named-item</i>

Tree	server-group-list
Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the server sends in a server Hello message.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[server-group-list-name] *named-item*

Synopsis	Name of the TLS server group list
Context	configure system security tls server-group-list <i>named-item</i>
Tree	server-group-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls13-group [[index](#)] *number*

Synopsis	Enter the tls13-group list instance
Context	configure system security tls server-group-list <i>named-item</i> tls13-group <i>number</i>
Tree	tls13-group
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the server in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[index](#)] *number*

Synopsis	Index number of the TLS 1.3 group
Context	configure system security tls server-group-list <i>named-item</i> tls13-group <i>number</i>
Tree	tls13-group
Range	1 to 255

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Name of the TLS 1.3 group suite code
Context	configure system security tls server-group-list <i>named-item</i> tls13-group <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448, tls-ml-kem1024
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-signature-list [**server-signature-list-name**] *named-item*

Synopsis	Enter the server-signature-list list instance
Context	configure system security tls server-signature-list <i>named-item</i>
Tree	server-signature-list
Description	Commands in this context configure the list of TLS 1.3-supported signature suite codes for the digital signature that the server sends in a server Hello message.
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[server-signature-list-name] *named-item*

Synopsis	Name of the TLS 1.3 server signature list
Context	configure system security tls server-signature-list <i>named-item</i>
Tree	server-signature-list
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls13-signature [[index](#)] *number*

Synopsis	Enter the tls13-signature list instance
Context	configure system security tls server-signature-list <i>named-item</i> tls13-signature <i>number</i>
Tree	tls13-signature
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the server in its Hello messages.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[index] *number*

Synopsis	Index number of the TLS 1.3 signature
Context	configure system security tls server-signature-list <i>named-item</i> tls13-signature <i>number</i>
Tree	tls13-signature
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	configure system security tls server-signature-list <i>named-item</i> tls13-signature <i>number</i> name <i>keyword</i>
Tree	name
Options	tls-ecdsa-secp256r1-sha256, tls-ecdsa-secp384r1-sha384, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512, tls-m1-dsa87
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server-tls-profile [[server-profile-name](#)] *named-item*

Synopsis	Enter the server-tls-profile list instance
Context	configure system security tls server-tls-profile <i>named-item</i>
Tree	server-tls-profile
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[server-profile-name] *named-item*

Synopsis	TLS server profile name
Context	configure system security tls server-tls-profile <i>named-item</i>
Tree	server-tls-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the server TLS profile
Context	configure system security tls server-tls-profile <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authenticate-client

Synopsis	Enter the authenticate-client context
Context	configure system security tls server-tls-profile <i>named-item</i> authenticate-client

Tree	authenticate-client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

common-name-list *reference*

Synopsis	Common name list for client certificate authentication
Context	configure system security tls server-tls-profile <i>named-item</i> authenticate-client common-name-list <i>reference</i>
Tree	common-name-list
Reference	configure system security pki common-name-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trust-anchor-profile *reference*

Synopsis	Trust anchor profile for client authentication
Context	configure system security tls server-tls-profile <i>named-item</i> authenticate-client trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure system security tls trust-anchor-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cert-profile *reference*

Synopsis	Certificate profile ID
Context	configure system security tls server-tls-profile <i>named-item</i> cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure system security tls cert-profile <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cipher-list *reference*

Synopsis	Cipher list used by the TLS server profile
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Context	configure system security tls server-tls-profile <i>named-item</i> cipher-list <i>reference</i>
Tree	cipher-list
Reference	configure system security tls server-cipher-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

group-list *reference*

Synopsis	Name of the list of supported group suite codes
Context	configure system security tls server-tls-profile <i>named-item</i> group-list <i>reference</i>
Tree	group-list
Description	This command assigns an existing TLS 1.3 group list to the TLS server profile.
Reference	configure system security tls server-group-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

protocol-version *keyword*

Synopsis	TLS protocol version used by the TLS server profile
Context	configure system security tls server-tls-profile <i>named-item</i> protocol-version <i>keyword</i>
Tree	protocol-version
Description	<p>This command configures the TLS version to be negotiated between the server and the client.</p> <p>The server adds the specified version as a supported version in its Hello message to the client.</p>
Options	tls-version-all , tls-version-12 , tls-version-13
Default	tls-version-12
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

signature-list *reference*

Synopsis	Name of the list of supported signature suite codes
Context	configure system security tls server-tls-profile <i>named-item</i> signature-list <i>reference</i>
Tree	signature-list

Description	This command assigns an existing TLS 1.3 signature list to the TLS server profile.
Reference	configure system security tls server-signature-list <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

status-verify

Synopsis	Enter the status-verify context
Context	configure system security tls server-tls-profile <i>named-item</i> status-verify
Tree	status-verify
Description	Commands in this context configure certificate revocation status verification options for the end-entity certificate in a TLS server.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

default-result *keyword*

Synopsis	Default result of certificate status verification
Context	configure system security tls server-tls-profile <i>named-item</i> status-verify default-result <i>keyword</i>
Tree	default-result
Description	<p>This command configures the default result of the entity certificate verification in the TLS server profile. This command overwrites the EE certificate revocation verification for the TLS server profile.</p> <p>By default the router checks the certification revocation status, but if this command is set to good, the end-entity certificate revocation status is overwritten and a good revocation status is returned for the EE certificate.</p> <p>If this command is set to revoked, the router returns the actual revocation status of the end-entity certificate.</p>
Options	revoked, good
Default	revoked
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ee-revocation

Synopsis	Enter the ee-revocation context
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Context	configure system security tls server-tls-profile <i>named-item</i> status-verify ee-revocation
Tree	ee-revocation
Description	Commands in this context configure the methods used to verify the end entity certificate revocation status for the TLS server profile.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

primary *keyword*

Synopsis	Primary method used to verify certificate revocation
Context	configure system security tls server-tls-profile <i>named-item</i> status-verify ee-revocation primary <i>keyword</i>
Tree	primary
Options	crl, ocsp
Default	crl
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure system security tls server-tls-profile <i>named-item</i> status-verify ee-revocation secondary <i>keyword</i>
Tree	secondary
Options	none, crl, ocsp
Default	none
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-re-negotiate-timer *number*

Synopsis	TLS HELLO request timer
Context	configure system security tls server-tls-profile <i>named-item</i> tls-re-negotiate-timer <i>number</i>
Tree	tls-re-negotiate-timer
Range	0 to 65000

Units	minutes
Default	0
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trust-anchor-profile [[trust-anchor-profile-name](#)] *named-item*

Synopsis	Enter the trust-anchor-profile list instance
Context	configure system security tls trust-anchor-profile <i>named-item</i>
Tree	trust-anchor-profile
Max. instances	16
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[trust-anchor-profile-name] *named-item*

Synopsis	Trust anchor profile name
Context	configure system security tls trust-anchor-profile <i>named-item</i>
Tree	trust-anchor-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

trust-anchor [[ca-profile-name](#)] *reference*

Synopsis	Add a list entry for trust-anchor
Context	configure system security tls trust-anchor-profile <i>named-item</i> trust-anchor <i>reference</i>
Tree	trust-anchor
Max. instances	8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ca-profile-name] reference

Synopsis	Trusted CA profile name
Context	configure system security tls trust-anchor-profile <i>named-item</i> trust-anchor <i>reference</i>
Tree	trust-anchor
Reference	configure system security pki ca-profile <i>named-item</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

use-pqc-only boolean

Synopsis	Negotiate only PQC ciphers, groups, and signatures
Context	configure system security tls use-pqc-only <i>boolean</i>
Tree	use-pqc-only
Description	<p>When configured to true, the router only uses PQC algorithms.</p> <p>When configured to true, the system requires that the signature, cipher, and group lists must each have at least one PQC algorithm configured. If this condition is not met, the system does not allow the list to be assigned to an administratively enabled server or client TLS profile. In addition, with this command enabled, TLS 1.3 only advertises PQC algorithms within each list in the TLS handshake and ignores any non-PQC algorithms, if they are present in the list.</p> <p>This is a system-wide token and, when enabled, it affects all TLS sessions. Consequently, it cannot be enabled if any server or client TLS profiles contain existing lists that do not support PQC algorithms. To enable this command, the user must first add a PQC algorithm to all lists that are assigned to administratively enabled profiles.</p> <p>When configured to false, the router allows both non-PQC and PQC algorithms to be negotiated.</p>
Default	false
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

user-params

Synopsis	Enter the user-params context
Context	configure system security user-params
Tree	user-params

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

attempts

Synopsis	Enter the attempts context
Context	configure system security user-params attempts
Tree	attempts
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count *number*

Synopsis	Number of unsuccessful login attempts
Context	configure system security user-params attempts count <i>number</i>
Tree	count
Range	1 to 64
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lockout *number*

Synopsis	Lockout period after unsuccessful login attempts
Context	configure system security user-params attempts lockout <i>number</i>
Tree	lockout
Range	0 to 1440
Units	minutes
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

time *number*

Synopsis	Time frame of unsuccessful login attempts
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Context	configure <i>system security user-params attempts time number</i>
Tree	<i>time</i>
Range	0 to 60
Units	minutes
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-order

Synopsis	Enter the authentication-order context
Context	configure <i>system security user-params authentication-order</i>
Tree	<i>authentication-order</i>
Description	<p>Commands in this context configure the sequence in which the system attempts authentication and authorization among the local user database, RADIUS servers, TACACS+ servers, and LDAP servers.</p> <p>Configure the order from the most preferred method to the least preferred. The presence of all methods in the command line does not guarantee they are all operational. Specifying options that are not available delays user authentication.</p> <p>If all operational methods are attempted and no authentication for a particular login has been granted, an entry in the security log records the failed attempt. Both the attempted login identification and originating IP address are logged with a timestamp.</p> <p>The default order is [radius tacplus ldap local].</p> <p>The order is not applicable to SNMPv3. SNMPv3 messages ignore the configured order and are authorized using the locally configured users only. TACACS+, RADIUS, and LDAP are not supported for SNMPv3 authentication.</p> <p>Note: This command applies to a local user, in addition to users on RADIUS, TACACS+, and LDAP.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

exit-on-reject *boolean*

Synopsis	Ignore subsequent AAA methods after a reject
Context	configure <i>system security user-params authentication-order exit-on-reject boolean</i>
Tree	<i>exit-on-reject</i>
Description	When configured to true , the router stops authentication if one of the AAA methods configured in the authentication order sends a rejection.

When configured to **false**, the router attempts the next AAA method if a AAA method sends a rejection. If all AAA methods are exhausted, authentication and authorization is rejected.

If the order specifies **local** as the first method, the following actions apply:

- If this command is set to **true** and the user does not exist, the user is not authenticated.
- If the user can be authenticated locally, other methods, if configured, are used for authorization and accounting.
- If the user is configured locally but without console access, login is denied.

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

order keyword

Synopsis	Authentication and authorization order
Context	configure system security user-params authentication-order order <i>keyword</i>
Tree	order
Description	This command specifies the order of authentication and authorization. The default order is [radius tacplus ldap local]
Options	local, radius, tacplus, ldap
Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

local-user

Synopsis	Enter the local-user context
Context	configure system security user-params local-user
Tree	local-user
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password

Synopsis	Enter the password context
Context	configure system security user-params local-user password
Tree	password
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

aging *number*

Synopsis	Maximum time during which a user password is valid
Context	configure system security user-params local-user password aging <i>number</i>
Tree	aging
Range	1 to 500
Units	days
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

complexity-rules

Synopsis	Enter the complexity-rules context
Context	configure system security user-params local-user password complexity-rules
Tree	complexity-rules
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-user-name *boolean*

Synopsis	Allow the username to be used as part of the password
Context	configure system security user-params local-user password complexity-rules allow-user-name <i>boolean</i>
Tree	allow-user-name
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

credits

Synopsis	Enter the credits context
Context	configure system security user-params local-user password complexity-rules credits
Tree	credits
Notes	The following elements are part of a choice: credits or required .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lowercase *number*

Synopsis	Maximum credits for the use of lowercase letters
Context	configure system security user-params local-user password complexity-rules credits lowercase <i>number</i>
Tree	lowercase
Range	1 to 10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

numeric *number*

Synopsis	Maximum credits for the use of numeric characters
Context	configure system security user-params local-user password complexity-rules credits numeric <i>number</i>
Tree	numeric
Range	1 to 10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

special-character *number*

Synopsis	Maximum credits for the use of special characters
Context	configure system security user-params local-user password complexity-rules credits special-character <i>number</i>
Tree	special-character
Range	1 to 10

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uppercase *number*

Synopsis	Maximum credits for the use of uppercase letters
Context	configure system security user-params local-user password complexity-rules credits uppercase <i>number</i>
Tree	uppercase
Range	1 to 10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

disallow-sequence-keys *number*

Synopsis	Minimum length of disallowed sequential characters
Context	configure system security user-params local-user password complexity-rules disallow-sequence-keys <i>number</i>
Tree	disallow-sequence-keys
Description	<p>This command configures the number of consecutive characters that are not allowed to be entered as part of the password on a U.S. English or Korean keyboard. These characters can be lowercase or uppercase letters, or numbers. Special characters are not taken into account. These consecutive characters can be horizontal (left to right) or (right to left) or diagonal (up to bottom or bottom to top). If the number of consecutive characters is equal to or larger than the configured value, the password is disallowed.</p> <p>For example, if the user attempts to use the password "dsalkjhgfdsa", with this command configured to 8, the system rejects the password because the first consecutive sequence "dsa" is 3 lowercase letters, which passes the check, but the second consecutive sequence is "lkjhgfdsa", which consists of 9 consecutive lowercase letters and this does not pass the check.</p>
Range	2 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-classes *number*

Synopsis	Minimum number of different character classes to use
Context	configure system security user-params local-user password complexity-rules minimum-classes <i>number</i>

Tree	minimum-classes
Range	2 to 4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-length *number*

Synopsis	Minimum length required for local passwords
Context	configure system security user-params local-user password complexity-rules minimum-length <i>number</i>
Tree	minimum-length
Description	<p>This command configures the minimum number of characters required for locally administered passwords, bcrypt and PBKDF2 configured in the system security context.</p> <p>If this command is entered multiple times, each command overwrites the previously entered command.</p> <p>The maximum plaintext password length depends on the configured password hash type in the configure system security user-params local-user password hashing context.</p> <ul style="list-style-type: none">• bcrypt - up to 72 characters• sha2-pbkdf2 and sha3-pbkdf2 - up to 128 characters
Range	6 to 128
Default	6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

repeated-characters *number*

Synopsis	Number of times same character can repeat consecutively
Context	configure system security user-params local-user password complexity-rules repeated-characters <i>number</i>
Tree	repeated-characters
Range	2 to 8
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

required

Synopsis	Enter the required context
Context	configure system security user-params local-user password complexity-rules required
Tree	required
Notes	The following elements are part of a choice: credits or required .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lowercase *number*

Synopsis	Number of lowercase letters required
Context	configure system security user-params local-user password complexity-rules required lowercase <i>number</i>
Tree	lowercase
Range	1 to 10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

numeric *number*

Synopsis	Number of numeric characters required
Context	configure system security user-params local-user password complexity-rules required numeric <i>number</i>
Tree	numeric
Range	1 to 10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

special-character *number*

Synopsis	Number of special characters required
Context	configure system security user-params local-user password complexity-rules required special-character <i>number</i>
Tree	special-character
Range	1 to 10

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

uppercase *number*

Synopsis	Number of uppercase letters required
Context	configure system security user-params local-user password complexity-rules required uppercase <i>number</i>
Tree	uppercase
Range	1 to 10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hashing *keyword*

Synopsis	Hashing algorithm for user passwords
Context	configure system security user-params local-user password hashing <i>keyword</i>
Tree	hashing
Options	bcrypt, sha2-pbkdf2, sha3-pbkdf2
Default	bcrypt
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

history-size *number*

Synopsis	Number of previous passwords to compare against
Context	configure system security user-params local-user password history-size <i>number</i>
Tree	history-size
Range	0 to 20
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-age *number*

Synopsis	Minimum age required for a password before changing it
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Context	configure system security user-params local-user password minimum-age <i>number</i>
Tree	minimum-age
Range	0 to 86400
Units	seconds
Default	600
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

minimum-change *number*

Synopsis	Minimum character differences between passwords
Context	configure system security user-params local-user password minimum-change <i>number</i>
Tree	minimum-change
Range	1 to 20
Default	5
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

user [[user-name](#)] *named-item*

Synopsis	Enter the user list instance
Context	configure system security user-params local-user user <i>named-item</i>
Tree	user
Description	Commands in this context configure local users.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[user-name] *named-item*

Synopsis	Local user name
Context	configure system security user-params local-user user <i>named-item</i>
Tree	user
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

access

Synopsis	Enter the access context
Context	configure system security user-params local-user user <i>named-item</i> access
Tree	access
Description	Commands in this context grant a user access to the router management access methods. If a user requires access to more than one method, multiple methods can be specified.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console *boolean*

Synopsis	Allow console port, SCP/SFTP, SSH, and Telnet access
Context	configure system security user-params local-user user <i>named-item</i> access console <i>boolean</i>
Tree	console
Description	When configured to true , the system allows this access method to take precedence over other access methods in all cases.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console-port-cli *boolean*

Synopsis	Allow console port CLI access
Context	configure system security user-params local-user user <i>named-item</i> access console-port-cli <i>boolean</i>
Tree	console-port-cli
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ftp boolean

Synopsis	Allow FTP access
Context	configure system security user-params local-user user <i>named-item</i> access ftp <i>boolean</i>
Tree	ftp
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

grpc boolean

Synopsis	Allow gRPC access
Context	configure system security user-params local-user user <i>named-item</i> access grpc <i>boolean</i>
Tree	grpc
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

netconf boolean

Synopsis	Allow NETCONF access
Context	configure system security user-params local-user user <i>named-item</i> access netconf <i>boolean</i>
Tree	netconf
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

scp-sftp boolean

Synopsis	Allow SCP/SFTP access
Context	configure system security user-params local-user user <i>named-item</i> access scp-sftp <i>boolean</i>
Tree	scp-sftp
Default	false

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

snmp *boolean*

Synopsis Allow SNMP access
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [access snmp](#)
boolean
Tree [snmp](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ssh-cli *boolean*

Synopsis Allow SSH CLI access
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [access ssh-cli](#)
boolean
Tree [ssh-cli](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

telnet-cli *boolean*

Synopsis Allow Telnet CLI access
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [access telnet-cli](#)
boolean
Tree [telnet-cli](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

cli-engine *keyword*

Synopsis User level override for CLI engine access

Context	configure system security user-params local-user user <i>named-item</i> cli-engine <i>keyword</i>
Tree	cli-engine
Options	classic-cli, md-cli
Max. instances	2
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

console

Synopsis	Enter the console context
Context	configure system security user-params local-user user <i>named-item</i> console
Tree	console
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cannot-change-password *boolean*

Synopsis	Change password privileges
Context	configure system security user-params local-user user <i>named-item</i> console cannot-change-password <i>boolean</i>
Tree	cannot-change-password
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

login-exec *string-not-all-spaces*

Synopsis	File to execute when the user logs in
Context	configure system security user-params local-user user <i>named-item</i> console login-exec <i>string-not-all-spaces</i>
Tree	login-exec
String length	1 to 200
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

member *reference*

Synopsis User profiles for this user

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [console](#) [member](#) *reference*

Tree [member](#)

Reference **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *named-item*

Max. instances 8

Notes This element is ordered by the user.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

new-password-at-login *boolean*

Synopsis Prompt the user to change their password at next login

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [console](#) [new-password-at-login](#) *boolean*

Tree [new-password-at-login](#)

Default false

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

home-directory *cflash-without-slot-url*

Synopsis Home directory for the user

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [home-directory](#) *cflash-without-slot-url*

Tree [home-directory](#)

Description This command configures the home directory of the user for file access. Files can be accessed locally by CLI **file** commands and output modifiers such as **>** (file redirect), or remotely via FTP and SCP. If the home directory does not exist, a warning message is displayed when the user logs in.

When **restricted-to-home** is configured, file access is denied unless the **home-directory** is configured and the directory is created by an administrator.

String length	1 to 200
String format	'cf1-without-slot-url' must be cf1-4: followed by path (e.g. cf1:/path)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

password *hashed-leaf*

Synopsis	User password
Context	configure system security user-params local-user user <i>named-item</i> password <i>hashed-leaf</i>
Tree	password
String length	3 to 136
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

public-keys

Synopsis	Enter the public-keys context
Context	configure system security user-params local-user user <i>named-item</i> public-keys
Tree	public-keys
Description	Commands in this context configure public keys for SSH.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecdsa

Synopsis	Enter the ecdsa context
Context	configure system security user-params local-user user <i>named-item</i> public-keys ecdsa
Tree	ecdsa
Description	Commands in this context configure Elliptic Curve Digital Signature Algorithm (ECDSA) public keys.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ecdsa-key [[ecdsa-public-key-id](#)] *number*

Synopsis	Enter the ecdsa-key list instance
Context	configure system security user-params local-user user <i>named-item</i> public-keys ecdsa ecdsa-key <i>number</i>
Tree	ecdsa-key
Description	Commands in this context configure an ECDSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ecdsa-public-key-id] *number*

Synopsis	ECDSA public key identifier
Context	configure system security user-params local-user user <i>named-item</i> public-keys ecdsa ecdsa-key <i>number</i>
Tree	ecdsa-key
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security user-params local-user user <i>named-item</i> public-keys ecdsa ecdsa-key <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-value *string-not-all-spaces*

Synopsis	ECDSA public key value
Context	configure system security user-params local-user user <i>named-item</i> public-keys ecdsa ecdsa-key <i>number</i> key-value <i>string-not-all-spaces</i>
Tree	key-value
Description	This command configures a value for the ECDSA public key. The public key must be enclosed in quotation marks. For ECDSA, the key is between 1 and 1024 bits.
String length	1 to 255
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ed25519

Synopsis	Enter the ed25519 context
Context	configure system security user-params local-user user <i>named-item</i> public-keys ed25519
Tree	ed25519
Description	Commands in this context configure Edwards-curve Digital Signature Algorithm (EdDSA) Curve25519 (Ed25519) public keys.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

ed25519-key [[ed25519-public-key-id](#)] *number*

Synopsis	Enter the ed25519-key list instance
Context	configure system security user-params local-user user <i>named-item</i> public-keys ed25519 ed25519-key <i>number</i>
Tree	ed25519-key
Description	Commands in this context configure an Ed25519 public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

[ed25519-public-key-id] *number*

Synopsis	Ed25519 public key identifier
Context	configure system security user-params local-user user named-item public-keys ed25519 ed25519-key <i>number</i>
Tree	ed25519-key
Range	1 to 32
Notes	This element is part of a list key.
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system security user-params local-user user named-item public-keys ed25519 ed25519-key <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

key-value *string-not-all-spaces*

Synopsis	Ed25519 public key value
Context	configure system security user-params local-user user named-item public-keys ed25519 ed25519-key <i>number</i> key-value <i>string-not-all-spaces</i>
Tree	key-value
Description	This command configures a value for the Ed25519 public key. The public key must be enclosed in quotation marks. For Ed25519, the key is between 8 and 544 bits.
String length	1 to 68
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

rsa

Synopsis	Enter the rsa context
Context	configure system security user-params local-user user <i>named-item</i> public-keys rsa
Tree	rsa
Description	Commands in this context configure RSA public keys.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rsa-key [[rsa-public-key-id](#)] *number*

Synopsis	Enter the rsa-key list instance
Context	configure system security user-params local-user user <i>named-item</i> public-keys rsa rsa-key <i>number</i>
Tree	rsa-key
Description	Commands in this context configure an RSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[rsa-public-key-id] *number*

Synopsis	RSA public key identifier
Context	configure system security user-params local-user user <i>named-item</i> public-keys rsa rsa-key <i>number</i>
Tree	rsa-key
Range	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
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Context	configure system security user-params local-user user <i>named-item</i> public-keys rsa rsa-key <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-value *string-not-all-spaces*

Synopsis	RSA public key value
Context	configure system security user-params local-user user <i>named-item</i> public-keys rsa rsa-key <i>number</i> key-value <i>string-not-all-spaces</i>
Tree	key-value
Description	This command configures a value for the RSA public key. The public key must be enclosed in quotation marks. For RSA, the key is between 768 and 4096 bits.
String length	1 to 800
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

restricted-to-home *boolean*

Synopsis	Restrict file access to the home directory of the user
Context	configure system security user-params local-user user <i>named-item</i> restricted-to-home <i>boolean</i>
Tree	restricted-to-home
Description	<p>When configured to true, the router denies the user from accessing files outside of their local home directory. Files can be accessed locally by CLI file commands and output modifiers such as > (file redirect). The system denies all configuration save operations (such as admin save) via any management interface (such as CLI and NETCONF) unless save-when-restricted is enabled.</p> <p>File access is denied unless a home directory is configured and the directory is created by an administrator.</p> <p>When configured to false, the router permits the user to access all files on the system and to remote files.</p>
Default	true
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

save-when-restricted *boolean*

Synopsis	Save configurations when the user is restricted to home
Context	configure system security user-params local-user user <i>named-item</i> save-when-restricted <i>boolean</i>
Tree	save-when-restricted
Description	<p>When configured to true, the system permits configuration save operations for all configuration regions (such as bof and configure) via any management interface (such as CLI and NETCONF) even if restricted-to-home is enabled.</p> <p>The configuration for each region can be saved with admin save CLI commands or when committed over NETCONF and gRPC.</p> <p>When configured to false, the system denies saving the configuration when restricted-to-home is enabled, unless the home directory of the user includes the location of the saved configuration file.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

snmp

Synopsis	Enter the snmp context
Context	configure system security user-params local-user user <i>named-item</i> snmp
Tree	snmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication

Synopsis	Enable the authentication context
Context	configure system security user-params local-user user <i>named-item</i> snmp authentication
Tree	authentication
Description	Commands in this context configure the SNMPv3 authentication and privacy protocols for the user to communicate with the router. The keys are stored in an encrypted format in the configuration.

The keys configured with these commands must be localized keys, which are a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system management-interface snmp generate-key** command to generate localized authentication and privacy keys.

If authentication is not configured, only the username is required to allow and authenticate SNMPv3 operations.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

authentication-key *encrypted-leaf-hex-without-prefix*

Synopsis Localized authentication key

Context **configure** system security user-params local-user user *named-item* snmp authentication authentication-key *encrypted-leaf-hex-without-prefix*

Tree authentication-key

Description This command specifies the authentication key for the authentication protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the **tools perform system management-interface snmp generate-key** command to generate a localized authentication key.

This command uses a protected format where the specific format is indicated by the **hash**, **hash2**, **hash3**, or **custom** suffix. See "Configuration secrets" in the *7705 SAR Gen 2 System Management Guide* for more information.

String length 1 to 166

String format 'encrypted-leaf-hex-without-prefix' must have clear text in hex without 0x or end with hash/hash2/hash3/custom

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

authentication-protocol *keyword*

Synopsis Authentication protocol

Context **configure** system security user-params local-user user *named-item* snmp authentication authentication-protocol *keyword*

Tree authentication-protocol

Options hmac-md5-96, hmac-sha1-96, hmac-sha2-224, hmac-sha2-256, hmac-sha2-384, hmac-sha2-512

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

privacy

Synopsis	Enable the privacy context
Context	configure system security user-params local-user user <i>named-item</i> snmp authentication privacy
Tree	privacy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

privacy-key *encrypted-leaf-hex-without-prefix*

Synopsis	Localized privacy key
Context	configure system security user-params local-user user <i>named-item</i> snmp authentication privacy privacy-key <i>encrypted-leaf-hex-without-prefix</i>
Tree	privacy-key
Description	<p>This command specifies the privacy key for the privacy protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the tools perform system management-interface snmp generate-key command to generate a localized privacy key.</p> <p>This command uses a protected format where the specific format is indicated by the hash, hash2, hash3, or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.</p>
String length	1 to 126
String format	'encrypted-leaf-hex-without-prefix' must have clear text in hex without 0x or end with hash/hash2/hash3/custom
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

privacy-protocol *keyword*

Synopsis	Privacy protocol
Context	configure system security user-params local-user user <i>named-item</i> snmp authentication privacy privacy-protocol <i>keyword</i>
Tree	privacy-protocol
Options	cbc-des, cfb128-aes-128, cfb128-aes-192, cfb128-aes-256
Notes	This element is mandatory.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

group *named-item*

Synopsis User to associate with a group name
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [snmp](#) [group](#) *named-item*
Tree [group](#)
String length 1 to 32
String format 'string-not-all-spaces' must contain at least one non-space character
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ssh-authentication-method

Synopsis Enter the **ssh-authentication-method** context
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [ssh-authentication-method](#)
Tree [ssh-authentication-method](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

client

Synopsis Enter the **client** context
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [ssh-authentication-method](#) [client](#)
Tree [client](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

public-key-only *keyword*

Synopsis Public key only SSH authentication for this user
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *named-item* [ssh-authentication-method](#) [client](#) [public-key-only](#) *keyword*

Tree	public-key-only
Description	<p>This command configures the authentication method accepted for the SSH session for the specified user. This user-level configuration overrides the system-level configuration defined in the configure system security ssh authentication-method public-key-only command.</p> <p>When unconfigured, the command inherits the setting from the system level command.</p> <p>The command options are:</p> <ul style="list-style-type: none"> • true — accept only public key client authentication for the SSH server • false — accept public key or password client authentication for the SSH server. If interactive-authentication is configured to true in the configure system security aaa remote-servers radius or configure system security aaa remote-servers tacplus context, the system also accepts interactive keyboard authentication.
Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server

Synopsis	Enter the server context
Context	configure system security user-params local-user user named-item ssh-authentication-method server
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

public-key-only keyword

Synopsis	Public key only SSH authentication for this user
Context	configure system security user-params local-user user named-item ssh-authentication-method server public-key-only keyword
Tree	public-key-only
Description	<p>This command configures the authentication method accepted for the SSH session for the specified user. This user-level configuration overrides the system-level configuration defined in the configure system security ssh authentication-method public-key-only command.</p> <p>When unconfigured, the command inherits the setting from the system level command.</p> <p>The command options are:</p> <ul style="list-style-type: none"> • true — accept only public key client authentication for the SSH server

- **false** — accept public key or password client authentication for the SSH server. If **interactive-authentication** is configured to **true** in the **configure system security aaa remote-servers radius** or **configure system security aaa remote-servers tacplus** context, the system also accepts interactive keyboard authentication.

Options	false, true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

vprn-network-exceptions

Synopsis	Enable the vprn-network-exceptions context
Context	configure system security vprn-network-exceptions
Tree	vprn-network-exceptions
Description	<p>Commands in this context configure the rate limiting attributes for processing packets with label TTL expiry received within an LSP shortcut or VPRN instances in the system and from all network IP interfaces. This includes labeled user and control plan packets, ping, and traceroute packets within GRT and VPRN, and ICMP replies.</p> <p>These commands do not rate limit MPLS or service OAM packets.</p>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

count *number*

Synopsis	Limit of exception messages received
Context	configure system security vprn-network-exceptions count <i>number</i>
Tree	count
Description	This command specifies the threshold limit of exception messages. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	10 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

window *number*

Synopsis	Time interval to measure exception messages
Context	configure system security vprn-network-exceptions window <i>number</i>

Tree	window
Description	This command configures the time interval within which exception messages are counted. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	1 to 60
Units	seconds
Default	10
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

telemetry

Synopsis	Enter the telemetry context
Context	configure system telemetry
Tree	telemetry
Description	Commands in this context configure the parameters for the dial-out telemetry functionality.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination-group [[name](#)] *named-item*

Synopsis	Enter the destination-group list instance
Context	configure system telemetry destination-group <i>named-item</i>
Tree	destination-group
Description	Commands in this context configure parameters for destination groups.
Max. instances	225
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[[name](#)] *named-item*

Synopsis	Destination group name
Context	configure system telemetry destination-group <i>named-item</i>
Tree	destination-group

String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	configure system telemetry destination-group <i>named-item</i> allow-unsecure-connection
Tree	allow-unsecure-connection
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system telemetry destination-group <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

destination [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number*

Synopsis	Enter the destination list instance
Context	configure system telemetry destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination

Max. instances	4
Notes	This element is ordered by the user.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	Address of the destination within the destination group
Context	configure system telemetry destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
String length	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

port *number*

Synopsis	TCP port number for the destination
Context	configure system telemetry destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i>
Tree	destination
Range	0 1 to 65535
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	configure system telemetry destination-group <i>named-item</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i> router-instance <i>string</i>
Tree	router-instance
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

tcp-keepalive

Synopsis Enter the **tcp-keepalive** context

Context **configure** [system telemetry destination-group named-item tcp-keepalive](#)

Tree [tcp-keepalive](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the TCP keep-alive algorithm

Context **configure** [system telemetry destination-group named-item tcp-keepalive admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

idle-time *number*

Synopsis Time until the first TCP keepalive probe is sent

Context **configure** [system telemetry destination-group named-item tcp-keepalive idle-time number](#)

Tree [idle-time](#)

Range 1 to 100000

Units seconds

Default 600

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

interval *number*

Synopsis Time between TCP keepalive probes

Context	configure system telemetry destination-group <i>named-item</i> tcp-keepalive interval <i>number</i>
Tree	interval
Range	1 to 100000
Units	seconds
Default	15
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

retries *number*

Synopsis	Number of probe retries before closing the connection
Context	configure system telemetry destination-group <i>named-item</i> tcp-keepalive retries <i>number</i>
Tree	retries
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

tls-client-profile *reference*

Synopsis	TLS client profile assigned to the destination group
Context	configure system telemetry destination-group <i>named-item</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>named-item</i>
Notes	The following elements are part of a choice: allow-unsecure-connection or tls-client-profile .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

notification-bundling

Synopsis	Enter the notification-bundling context
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Context	configure system telemetry notification-bundling
Tree	notification-bundling
Description	Commands in this context configure the bundling of multiple notifications into one telemetry message.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of notification bundling
Context	configure system telemetry notification-bundling admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-msg-count *number*

Synopsis	Maximum notifications count in telemetry message bundle
Context	configure system telemetry notification-bundling max-msg-count <i>number</i>
Tree	max-msg-count
Range	2 to 1000
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-time-granularity *number*

Synopsis	Maximum interval when bundling of notifications occurs
Context	configure system telemetry notification-bundling max-time-granularity <i>number</i>
Tree	max-time-granularity
Description	This command sets the maximum time interval during which telemetry notifications are bundled. All bundled notifications have the same timestamp, which is the timestamp of the bundle.

Range	1 to 1000
Units	milliseconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

persistent-subscriptions

Synopsis	Enter the persistent-subscriptions context
Context	configure system telemetry persistent-subscriptions
Tree	persistent-subscriptions
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delay-on-boot *number*

Synopsis	Delay for persistent subscriptions after system boot
Context	configure system telemetry persistent-subscriptions delay-on-boot <i>number</i>
Tree	delay-on-boot
Description	<p>This command configures the delay timer for gRPC telemetry persistent subscriptions. When the timer expires, gRPC telemetry persistent subscriptions become operational and connections are initiated. This delay prevents the system from trying to establish gRPC persistent subscriptions while it is still converging.</p> <p>When no delay is configured, gRPC telemetry persistent subscriptions are initiated after the system boots and gRPC becomes operational.</p>
Range	1 to 3600
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

subscription [[name](#)] *named-item*

Synopsis	Enter the subscription list instance
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i>
Tree	subscription

Max. instances	225
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Persistent subscription name
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i>
Tree	subscription
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the persistent subscription
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

destination-group *reference*

Synopsis Name of the destination group used in the subscription

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *named-item* [destination-group](#) *reference*

Tree [destination-group](#)

Reference **configure** [system](#) [telemetry](#) [destination-group](#) *named-item*

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

encoding *keyword*

Synopsis Encoding used for telemetry notifications

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *named-item* [encoding](#) *keyword*

Tree [encoding](#)

Description This command specifies the encoding used for telemetry notifications as defined by the gNMI OpenConfig standard.

Options
 json – JSON encoded text
 bytes – Encoded according to gnmi.schemas
 proto – Encoded with scalar TypedValue values
 json-ietf – JSON encoded text as per RFC 7951

Default json

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

local-source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Local IP address of packets sent from the source

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *named-item* [local-source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [local-source-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

mode *keyword*

Synopsis	Mode for telemetry notifications
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i> mode <i>keyword</i>
Tree	mode
Description	This command specifies the subscription path mode for telemetry notifications sent out for the persistent subscription.
Options	target-defined, on-change, sample
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

originated-qos-marking *keyword*

Synopsis	QoS marking used for telemetry notification packets
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i> originated-qos-marking <i>keyword</i>
Tree	originated-qos-marking
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sample-interval *number*

Synopsis	Sampling interval for the persistent subscription
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i> sample-interval <i>number</i>
Tree	sample-interval
Description	This command configures the sampling interval for the persistent subscription. The interval applies only in sampling or target-defined modes.
Range	1000 to 18446744073709551615
Units	milliseconds
Default	10000

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sensor-group *reference*

Synopsis	Sensor group used in the persistent subscription
Context	configure system telemetry persistent-subscriptions subscription <i>named-item</i> sensor-group <i>reference</i>
Tree	sensor-group
Description	This command specifies the sensor group to be used in the persistent subscription. If no valid paths exist in the sensor group, the configuration is accepted, however, no gRPC connection is established when persistent subscription is activated.
Reference	configure system telemetry sensor-groups sensor-group <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sensor-groups

Synopsis	Enter the sensor-groups context
Context	configure system telemetry sensor-groups
Tree	sensor-groups
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sensor-group [[name](#)] *named-item*

Synopsis	Enter the sensor-group list instance
Context	configure system telemetry sensor-groups sensor-group <i>named-item</i>
Tree	sensor-group
Max. instances	225
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	Sensor group name
Context	configure system telemetry sensor-groups sensor-group <i>named-item</i>
Tree	sensor-group
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system telemetry sensor-groups sensor-group <i>named-item</i> description
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

path [[xpath](#)] *string*

Synopsis	Add a list entry for path
Context	configure system telemetry sensor-groups sensor-group <i>named-item</i> path <i>string</i>
Tree	path
Max. instances	4500
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[xpath] *string*

Synopsis	gNMI path to be streamed
Context	configure system telemetry sensor-groups sensor-group <i>named-item</i> path <i>string</i>

Tree	path
Description	This command configures a path for the specified sensor group. Multiple paths can be defined for a single sensor group. Streamed data includes all descendants of the tree indicated by the path. The path is defined in the form of an XML Path (XPath) syntax that refers to single or multiple objects within the YANG model. The path must be enclosed in quotation marks (") when it includes a list key, for example, <code>"/state/router[router-name=Base]"</code> .
String length	1 to 512
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

thresholds

Synopsis	Enter the thresholds context
Context	configure system thresholds
Tree	thresholds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cflash-cap-alarm-percent [[cflash-id](#)] *thresholds-cflash-url*

Synopsis	Enter the cflash-cap-alarm-percent list instance
Context	configure system thresholds cflash-cap-alarm-percent <i>thresholds-cflash-url</i>
Tree	cflash-cap-alarm-percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cflash-id] *thresholds-cflash-url*

Synopsis	cflash device name monitored for capacity
Context	configure system thresholds cflash-cap-alarm-percent <i>thresholds-cflash-url</i>
Tree	cflash-cap-alarm-percent
String length	1 to 200
String format	'thresholds-cflash-url' must be cf1-4 with slot A-D (e.g. cf1-A:)
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds cflash-cap-alarm-percent thresholds-cflash-url falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	0 to 100
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds cflash-cap-alarm-percent thresholds-cflash-url interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds cflash-cap-alarm-percent thresholds-cflash-url rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds cflash-cap-alarm-percent thresholds-cflash-url rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Options	none, log, trap, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds cflash-cap-alarm-percent thresholds-cflash-url startup-alarm <i>keyword</i>
Tree	startup-alarm

Description	<p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either, a single rising threshold crossing event is generated.</p> <p>If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either, a single falling threshold crossing event is generated.</p>
Options	<p>rising – Raise TCA if threshold is crossed in upward direction</p> <p>falling – Raise TCA if threshold is crossed in downward direction</p> <p>either – Raise TCA if threshold is crossed from either direction</p>
Default	either
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

cflash-cap-warn-percent [**cflash-id**] *thresholds-cflash-url*

Synopsis	Enter the cflash-cap-warn-percent list instance
Context	configure system thresholds cflash-cap-warn-percent <i>thresholds-cflash-url</i>
Tree	cflash-cap-warn-percent
Description	Commands in this context configure the capacity monitoring of the compact flash. The usage is monitored as a percentage of the capacity of the compact flash. The severity level is warning. Both a rising and falling threshold can be specified.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[cflash-id] *thresholds-cflash-url*

Synopsis	cflash device name monitored for capacity
Context	configure system thresholds cflash-cap-warn-percent <i>thresholds-cflash-url</i>
Tree	cflash-cap-warn-percent
String length	1 to 200
String format	'thresholds-cflash-url' must be cf1-4 with slot A-D (e.g. cf1-A:)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
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Context	configure system thresholds cflash-cap-warn-percent <i>thresholds-cflash-url</i> falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	0 to 100
Units	percent
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds cflash-cap-warn-percent <i>thresholds-cflash-url</i> interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds cflash-cap-warn-percent <i>thresholds-cflash-url</i> rising-threshold <i>number</i>
Tree	rising-threshold
Description	This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is

generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values.

After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.

Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds cflash-cap-warn-percent thresholds-cflash-url rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Options	none, log, trap, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds cflash-cap-warn-percent thresholds-cflash-url startup-alarm <i>keyword</i>
Tree	startup-alarm
Description	<p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either, a single rising threshold crossing event is generated.</p> <p>If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either, a single falling threshold crossing event is generated.</p>
Options	<p>rising – Raise TCA if threshold is crossed in upward direction</p> <p>falling – Raise TCA if threshold is crossed in downward direction</p> <p>either – Raise TCA if threshold is crossed from either direction</p>
Default	either

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kb-memory-use-alarm

Synopsis	Enable the kb-memory-use-alarm context
Context	configure system thresholds kb-memory-use-alarm
Tree	kb-memory-use-alarm
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-alarm falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	-2147483648 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds kb-memory-use-alarm interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647

Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-alarm rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds kb-memory-use-alarm rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Options	none, log, trap, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds kb-memory-use-alarm startup-alarm <i>keyword</i>

Tree	startup-alarm
Description	<p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either, a single rising threshold crossing event is generated.</p> <p>If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either, a single falling threshold crossing event is generated.</p>
Options	<p>rising – Raise TCA if threshold is crossed in upward direction</p> <p>falling – Raise TCA if threshold is crossed in downward direction</p> <p>either – Raise TCA if threshold is crossed from either direction</p>
Default	either
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

kb-memory-use-warn

Synopsis	Enable the kb-memory-use-warn context
Context	configure system thresholds kb-memory-use-warn
Tree	kb-memory-use-warn
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-warn falling-threshold <i>number</i>
Tree	falling-threshold
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p>
Range	-2147483648 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds kb-memory-use-warn interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rising-threshold *number*

Synopsis	Rising threshold for the sampled statistic
Context	configure system thresholds kb-memory-use-warn rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p>
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rmon-event-type *keyword*

Synopsis	Notification type specifying action when event occurs
Context	configure system thresholds kb-memory-use-warn rmon-event-type <i>keyword</i>
Tree	rmon-event-type
Options	none, log, trap, both

Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-alarm *keyword*

Synopsis	Alarm type when the alarm is first created
Context	configure system thresholds kb-memory-use-warn startup-alarm <i>keyword</i>
Tree	startup-alarm
Description	<p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either, a single rising threshold crossing event is generated.</p> <p>If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either, a single falling threshold crossing event is generated.</p>
Options	<p>rising – Raise TCA if threshold is crossed in upward direction</p> <p>falling – Raise TCA if threshold is crossed in downward direction</p> <p>either – Raise TCA if threshold is crossed from either direction</p>
Default	either
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rmon

Synopsis	Enter the rmon context
Context	configure system thresholds rmon
Tree	rmon
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

alarm [[rmon-alarm-id](#)] *number*

Synopsis	Enter the alarm list instance
Context	configure system thresholds rmon alarm <i>number</i>
Tree	alarm
Description	Commands in this context configure an entry in the RMON-MIB alarmTable and controls the monitoring and triggering of threshold crossing events.

At least one associated **configure system thresholds rmon event** command must be configured to trigger the notification or logging of a threshold crossing event.

The agent periodically takes statistical sample values from the MIB variable specified for monitoring and compares them to thresholds configured with this command. This command configures the MIB variable for monitoring, the polling period (interval), the sampling type (absolute or delta value), and the rising and falling threshold commands. If a sample has crossed a threshold value, the associated event is generated.

Max. instances	1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[rmon-alarm-id] *number*

Synopsis	RMON alarm identifier
Context	configure system thresholds rmon alarm <i>number</i>
Tree	alarm
Range	0 to 65400
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

falling-event *number*

Synopsis	RMON event ID for falling threshold crossing event
Context	configure system thresholds rmon alarm <i>number</i> falling-event <i>number</i>
Tree	falling-event
Range	0 to 65400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

falling-threshold *number*

Synopsis	Threshold for the falling sampled statistic
Context	configure system thresholds rmon alarm <i>number</i> falling-threshold <i>number</i>
Tree	falling-threshold

Description	<p>This command configures the router to create a threshold event when the current sampled value is less than or equal to this threshold value, and the value at the last sampling interval was greater than this threshold.</p> <p>A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm is equal to falling or either.</p> <p>After a falling threshold crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold value.</p>
Range	-2147483648 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds rmon alarm <i>number</i> interval <i>number</i>
Tree	interval
Description	<p>This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.</p> <p>When setting this interval value, take care in the case of delta type sampling, set the interval short enough that the sampled variable is very unlikely to increase or decrease by more than 2147483647 - 1 during a single sampling interval. Take care to avoid setting the interval value too low, to avoid creating unnecessary processing overhead.</p>
Range	1 to 2147483647
Units	seconds
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner *string-not-all-spaces*

Synopsis	Owner that created this entry and uses the resources
Context	configure system thresholds rmon alarm <i>number</i> owner <i>string-not-all-spaces</i>
Tree	owner
Description	<p>This command configures the owner of the alarm.</p> <p>This command allows entries created in the RMON-MIB alarmTable by remote SNMP managers to save and reload in a CLI configuration file. CLI users do not normally configure the owner.</p>

String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Default	TIMOS CLI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rising-event *number*

Synopsis	RMON event ID for rising threshold crossing event
Context	configure system thresholds rmon alarm <i>number</i> rising-event <i>number</i>
Tree	rising-event
Range	0 to 65400
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

rising-threshold *number*

Synopsis	Threshold for the rising sampled statistic
Context	configure system thresholds rmon alarm <i>number</i> rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command configures the router to create a single threshold crossing event when the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold.</p> <p>A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm is equal to rising or either.</p> <p>After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold value.</p>
Range	-2147483648 to 2147483647
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sample-type *keyword*

Synopsis	Sampling type for value comparison with thresholds
Context	configure system thresholds rmon alarm <i>number</i> sample-type <i>keyword</i>

Tree	sample-type
Options	absolute – Value compared with end sampling interval thresholds delta – Selected minus current and compared with thresholds
Default	absolute
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

startup-alarm *keyword*

Synopsis	TCA type eligible to be raised on the test's first poll
Context	configure system thresholds rmon alarm <i>number</i> startup-alarm <i>keyword</i>
Tree	startup-alarm
Options	rising – Raise TCA if threshold is crossed in upward direction falling – Raise TCA if threshold is crossed in downward direction either – Raise TCA if threshold is crossed from either direction
Default	either
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

variable-oid *string*

Synopsis	Object identifier to sample the specific variable
Context	configure system thresholds rmon alarm <i>number</i> variable-oid <i>string</i>
Tree	variable-oid
Description	This command configures the SNMP object identifier of the particular variable for sampling. Only SNMP variables that resolve to an ASN.1 primitive type of integer (Integer32, Counter32, Counter64, Gauge, or TimeTicks) may be sampled. The <i>oid-string</i> may be expressed using either the dotted string notation or as object name plus dotted instance identifier. For example, "1.3.6.1.2.1.2.2.1.10.184582144" or "ifInOctets.184582144".
String length	1 to 255
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event [*rmon-event-id*] *number*

Synopsis	Enter the event list instance
Context	configure system thresholds rmon event <i>number</i>
Tree	event
Max. instances	1200
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[rmon-event-id] *number*

Synopsis	Index ID for an entry in the event table
Context	configure system thresholds rmon event <i>number</i>
Tree	event
Range	1 to 65400
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure system thresholds rmon event <i>number</i> description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-type *keyword*

Synopsis	Notification action to be taken when the event occurs
Context	configure system thresholds rmon event <i>number</i> event-type <i>keyword</i>
Tree	event-type

Options	none, log, trap, both
Default	both
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

owner string-not-all-spaces

Synopsis	Owner that created this entry and uses the resources
Context	configure system thresholds rmon event <i>number</i> owner <i>string-not-all-spaces</i>
Tree	owner
Description	This command configures the owner of the alarm. This command allows entries created in the RMON-MIB alarmTable by remote SNMP managers to save and reload in a CLI configuration file. CLI users do not normally configure the owner.
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Default	TIMOS CLI
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hc-alarm [**rmon-hc-alarm-id**] *number*

Synopsis	Enter the hc-alarm list instance
Context	configure system thresholds rmon hc-alarm <i>number</i>
Tree	hc-alarm
Description	Commands in this context configure an entry in the HC-ALARM-MIB hcAlarmTable and controls the monitoring and triggering of threshold crossing events. At least one associated configure system thresholds rmon event command must be configured to trigger the notification or logging of a threshold crossing event. The agent periodically takes statistical sample values from the MIB variable specified for monitoring and compares them to thresholds configured with this command. This command configures the MIB variable for monitoring, the polling period (interval), the sampling type (absolute or delta value), and the rising and falling threshold commands. If a sample has crossed a threshold value, the associated event is generated.
Max. instances	1200
Introduced	25.10.R1

Platforms 7705 SAR Gen 2

[rmon-hc-alarm-id] *number*

Synopsis	RMON high capacity alarm identifier
Context	configure system thresholds rmon hc-alarm <i>number</i>
Tree	hc-alarm
Range	1 to 65400
Notes	This element is part of a list key.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

falling-event *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	RMON event ID for falling threshold crossing event
Context	configure system thresholds rmon hc-alarm <i>number</i> falling-event <i>number</i>
Tree	falling-event
Range	1 to 65400
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

falling-threshold *number*

**WARNING:**
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Threshold for the falling sampled statistic
Context	configure system thresholds rmon hc-alarm <i>number</i> falling-threshold <i>number</i>
Tree	falling-threshold
Description	This command configures the router to create a threshold event when the current sampled value is less than or equal to this threshold value, and the value at the last sampling interval was greater than this threshold.

A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** is equal to **falling** or **either**.

After a falling threshold crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** value.

Range	-9223372036854775806 to 9223372036854775807
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

interval *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Polling period over which data is sampled and compared
Context	configure system thresholds rmon hc-alarm <i>number</i> interval <i>number</i>
Tree	interval
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Units	seconds
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

owner *string-not-all-spaces*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Owner that created this entry and uses the resources
Context	configure system thresholds rmon hc-alarm <i>number</i> owner <i>string-not-all-spaces</i>
Tree	owner
Description	This command configures the owner of the entry.

This command allows entries created in the HC-ALARM-MIB hcAlarmTable by a remote SNMP or YANG manager to be tagged as belonging to a set of entries defined by the manager.

String length	1 to 127
String format	'string-not-all-spaces' must contain at least one non-space character
Default	TIMOS CLI
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

rising-event *number*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	RMON event ID for rising threshold crossing event
Context	configure system thresholds rmon hc-alarm <i>number</i> rising-event <i>number</i>
Tree	rising-event
Range	1 to 65400
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

rising-threshold *number*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Threshold for the rising sampled statistic
Context	configure system thresholds rmon hc-alarm <i>number</i> rising-threshold <i>number</i>
Tree	rising-threshold
Description	<p>This command configures the router to create a single threshold crossing event when the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold.</p> <p>A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm is equal to rising or either.</p>

After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** value.

Range	-9223372036854775806 to 9223372036854775807
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

sample-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Sampling type for value comparison with thresholds
Context	configure system thresholds rmon hc-alarm number sample-type <i>keyword</i>
Tree	sample-type
Options	absolute – Value compared with end sampling interval thresholds delta – Selected minus current and compared with thresholds
Default	absolute
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

startup-alarm keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TCA type eligible to be raised on the test's first poll
Context	configure system thresholds rmon hc-alarm number startup-alarm <i>keyword</i>
Tree	startup-alarm
Options	rising – Raise TCA if threshold is crossed in upward direction falling – Raise TCA if threshold is crossed in downward direction either – Raise TCA if threshold is crossed from either direction
Default	either
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

variable-oid *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Object identifier to sample the specific variable
Context	configure system thresholds rmon hc-alarm <i>number</i> variable-oid <i>string</i>
Tree	variable-oid
Description	<p>This command configures the SNMP object identifier of the particular variable for sampling.</p> <p>Only SNMP variables that resolve to an ASN.1 primitive type of integer (Integer32, Counter32, Counter64, Gauge, or TimeTicks) may be sampled. The <i>oid-string</i> may be expressed using either the dotted string notation or as object name plus dotted instance identifier. For example, "1.3.6.1.2.1.2.2.1.10.184582144" or "ifInOctets.184582144".</p>
String length	1 to 255
Notes	This element is mandatory.
Introduced	25.10.R1
Platforms	7705 SAR Gen 2

time

Synopsis	Enter the time context
Context	configure system time
Tree	time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

daylight-saving-time-zone

Synopsis	Enter the daylight-saving-time-zone context
Context	configure system time daylight-saving-time-zone
Tree	daylight-saving-time-zone
Description	<p>Commands in this context configure the start and end dates and offset for summer time (or Daylight Savings Time [DST]).</p> <p>A daylight savings time zone can be specified using a standard name or a non-standard name. The parameters (start day, end day, and offset) for a standard name zone are well defined and not configurable. The parameters for a nonstandard name zone are</p>

configurable. The time is adjusted by adding the offset when summer time starts and subtracting the offset when summer time ends.

If no summer (daylight savings) time is supplied, the system assumes no summer time adjustment is required.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

non-standard

Synopsis Enter the **non-standard** context

Context **configure** [system time daylight-saving-time-zone non-standard](#)

Tree [non-standard](#)

Notes The following elements are part of a choice: **non-standard** or **standard**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

end

Synopsis Enter the **end** context

Context **configure** [system time daylight-saving-time-zone non-standard end](#)

Tree [end](#)

Description Commands in this context configure the end of summer time settings.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

day keyword

Synopsis Day of the week when summer time ends

Context **configure** [system time daylight-saving-time-zone non-standard end day](#) *keyword*

Tree [day](#)

Options sunday, monday, tuesday, wednesday, thursday, friday, saturday

Default sunday

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

hours-minutes *hours-minutes-twenty-four*

Synopsis	Time when summer time ends, in hh:mm format
Context	configure system time daylight-saving-time-zone non-standard end hours-minutes hours-minutes-twenty-four
Tree	hours-minutes
String length	5
String format	'hours-minutes-twenty-four' must be hh:mm, hours 00-23, minutes 00-59 (e.g. 14:30)
Default	00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

month *keyword*

Synopsis	Month when summer time ends
Context	configure system time daylight-saving-time-zone non-standard end month <i>keyword</i>
Tree	month
Options	january, february, march, april, may, june, july, august, september, october, november, december
Default	january
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

week *keyword*

Synopsis	Week of the month when summer time ends
Context	configure system time daylight-saving-time-zone non-standard end week <i>keyword</i>
Tree	week
Options	first, second, third, fourth, last
Default	first
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *string*

Synopsis	Nonstandard summer time zone name
Context	configure system time daylight-saving-time-zone non-standard <i>name string</i>
Tree	name
String length	1 to 5
String format	'name' must contain only lowercase letters and digits (e.g. utc5)
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

offset *number*

Synopsis	Summer time offset
Context	configure system time daylight-saving-time-zone non-standard <i>offset number</i>
Tree	offset
Description	This command configures the number of minutes that are added to the time when summer time takes effect. The same number of minutes are subtracted from the time when summer time ends.
Range	0 to 60
Units	minutes
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

start

Synopsis	Enter the start context
Context	configure system time daylight-saving-time-zone non-standard <i>start</i>
Tree	start
Description	Commands in this context configure the start of summer time settings.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

day keyword

Synopsis	Day of the week when summer time starts
Context	configure system time daylight-saving-time-zone non-standard start day <i>keyword</i>
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Default	sunday
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hours-minutes *hours-minutes-twenty-four*

Synopsis	Time when summer time starts, in hh:mm format
Context	configure system time daylight-saving-time-zone non-standard start hours-minutes <i>hours-minutes-twenty-four</i>
Tree	hours-minutes
String length	5
String format	'hours-minutes-twenty-four' must be hh:mm, hours 00-23, minutes 00-59 (e.g. 14:30)
Default	00:00
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

month keyword

Synopsis	Month when summer time starts
Context	configure system time daylight-saving-time-zone non-standard start month <i>keyword</i>
Tree	month
Options	january, february, march, april, may, june, july, august, september, october, november, december
Default	january
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

week keyword

Synopsis	Week of the month when summer time starts
Context	configure system time daylight-saving-time-zone non-standard start week <i>keyword</i>
Tree	week
Options	first, second, third, fourth, last
Default	first
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

standard

Synopsis	Enter the standard context
Context	configure system time daylight-saving-time-zone standard
Tree	standard
Notes	The following elements are part of a choice: non-standard or standard .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name keyword

Synopsis	Standard time zone name
Context	configure system time daylight-saving-time-zone standard name <i>keyword</i>
Tree	name
Options	adt – Atlantic Daylight Time ndt – Newfoundland Daylight Time akdt – Alaska Daylight Time cdt – Central Daylight Time cest – Central European Summer Time edt – Eastern Daylight Time eest – Eastern European Summer Time mdt – Mountain Daylight Time nzdt – New Zealand Daylight Time pdt – Pacific Daylight Time west – Western European Summer Time
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ntp

Synopsis	Enable the ntp context
Context	configure system time ntp
Tree	ntp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of NTP execution
Context	configure system time ntp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-check *boolean*

Synopsis	Authenticate NTP PDUs and reject mismatches
Context	configure system time ntp authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-key [[key-id](#)] *number*

Synopsis	Enter the authentication-key list instance
Context	configure system time ntp authentication-key <i>number</i>
Tree	authentication-key
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[key-id] number

Synopsis	Authentication key ID used for NTP packets
Context	configure system time ntp authentication-key <i>number</i>
Tree	authentication-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key encrypted-leaf

Synopsis	Key to authenticate NTP packets
Context	configure system time ntp authentication-key <i>number</i> key <i>encrypted-leaf</i>
Tree	key
Description	This command specifies the key to authenticate NTP packets in a protected format. The specific format is indicated by the hash , hash2 , hash3 , or custom suffix. See "Configuration secrets" in the <i>7705 SAR Gen 2 System Management Guide</i> for more information.
String length	1 to 126
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

type keyword

Synopsis	Authentication method to authenticate NTP packet
Context	configure system time ntp authentication-key <i>number</i> type <i>keyword</i>
Tree	type
Options	des, message-digest
Notes	This element is mandatory.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Authentication keychain for unsolicited traffic
Context	configure system time ntp authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command configures the authentication keychain used to handle unsolicited NTP requests.</p> <p>If a request is received with a key ID that matches both a configured key and the keychain, the MAC is checked first using the key information. If the authentication fails, the MAC is checked using the information from the keychain.</p>
Reference	configure system security keychains keychain <i>named-item</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast [[router-instance](#)] *reference* [interface-name](#) *interface-name*

Synopsis	Enter the broadcast list instance
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i>
Tree	broadcast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-instance] *reference*

Synopsis	Router name
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i>
Tree	broadcast
Reference	configure router <i>named-item-64</i>
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface to transmit or receive NTP broadcast packets
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i>

Tree	broadcast
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.</p>
Reference	configure system security keychains keychain <i>named-item</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i> key-id <i>reference</i>
Tree	key-id
Reference	configure system time ntp authentication-key <i>number</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ttl *number*

Synopsis	TTL of messages transmitted by the broadcast address
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i> ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	127
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *number*

Synopsis	NTP version number generated by the node
Context	configure system time ntp broadcast <i>reference</i> interface-name <i>interface-name</i> version <i>number</i>
Tree	version
Range	2 to 4
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

broadcast-client [[router-instance](#)] *string* [interface-name](#) *interface-name*

Synopsis	Enter the broadcast-client list instance
Context	configure system time ntp broadcast-client <i>string</i> interface-name <i>interface-name</i>
Tree	broadcast-client
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[router-instance] *string*

Synopsis	Router name or VPRN service name
Context	configure system time ntp broadcast-client <i>string</i> interface-name <i>interface-name</i>
Tree	broadcast-client

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interface-name *interface-name*

Synopsis	Interface to transmit or receive NTP broadcast packets
Context	configure system time ntp broadcast-client <i>string</i> interface-name <i>interface-name</i>
Tree	broadcast-client
String length	1 to 32
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authenticate *boolean*

Synopsis	Enforce authentication of NTP PDUs
Context	configure system time ntp broadcast-client <i>string</i> interface-name <i>interface-name</i> authenticate <i>boolean</i>
Tree	authenticate
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-poll *number*

Synopsis	Value for the maximum polling interval as a power of 2
Context	configure system time ntp max-poll <i>number</i>
Tree	max-poll
Description	<p>This command configures the value used to calculate the maximum polling interval set for the server. The poll interval set by NTP may be as high as the configured number to the power of 2. For example, if 6 is configured, 2 to the power of 6 (2^6) equals 64.</p> <p>If the value is set to a number lower than the configure system time ntp min-poll value, the system rejects the change request.</p>
Range	4 to 10
Default	6

Introduced	26.7.R1
Platforms	7705 SAR Gen 2

min-poll *number*

Synopsis	Value for the minimum polling interval as a power of 2
Context	configure system time ntp min-poll <i>number</i>
Tree	min-poll
Description	<p>This command configures the value used to calculate the minimum polling interval set for the server. The poll interval set by NTP may be as low as the configured number to the power of 2. For example, if 6 is configured, 2 to the power of 6 (2^6) equals 64.</p> <p>If the value is set to a number higher than the configure system time ntp max-poll, the system rejects the change request.</p>
Range	4 to 10
Default	6
Introduced	26.7.R1
Platforms	7705 SAR Gen 2

multicast

Synopsis	Enable the multicast context
Context	configure system time ntp multicast
Tree	multicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	configure system time ntp multicast authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain</p>

entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.

Reference	configure system security keychains keychain <i>named-item</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-id reference

Synopsis	Authentication key and type used by the node
Context	configure system time ntp multicast key-id <i>reference</i>
Tree	key-id
Reference	configure system time ntp authentication-key <i>number</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version number

Synopsis	NTP version number generated by the node
Context	configure system time ntp multicast version <i>number</i>
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

multicast-client

Synopsis	Enable the multicast-client context
Context	configure system time ntp multicast-client
Tree	multicast-client

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

authenticate *boolean*

Synopsis Enforce authentication of NTP PDUs
Context **configure** [system](#) [time](#) [ntp](#) [multicast-client](#) [authenticate](#) *boolean*
Tree [authenticate](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

ntp-server

Synopsis Enable the **ntp-server** context
Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#)
Tree [ntp-server](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

authenticate *boolean*

Synopsis Authentication of NTP PDUs when acting as a server
Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#) [authenticate](#) *boolean*
Tree [authenticate](#)
Default false
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

peer [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [router-instance](#) *string*

Synopsis Enter the **peer** list instance
Context **configure** [system](#) [time](#) [ntp](#) [peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [router-instance](#) *string*
Tree [peer](#)

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the peer for a peering relationship
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance *string*

Synopsis	Router name or VPRN service name
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually</p>

exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.

Reference	configure system security keychains keychain <i>named-item</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string key-id reference</i>
Tree	key-id
Reference	configure system time ntp authentication-key <i>number</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer *boolean*

Synopsis	Set NTP server as preferred to receive time
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string prefer boolean</i>
Tree	prefer
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *number*

Synopsis	NTP version number generated by the node
Context	configure system time ntp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router-instance <i>string version number</i>
Tree	version

Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[ip-address](#)] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#) | [keyword](#)) [router-instance string](#)

Synopsis	Enter the server list instance
Context	configure system time ntp server (ipv4-address-no-zone ipv6-address-no-zone keyword) router-instance string
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#) | [keyword](#))

Synopsis	IP address of an external NTP server
Context	configure system time ntp server (ipv4-address-no-zone ipv6-address-no-zone keyword) router-instance string
Tree	server
Options	ptp
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

router-instance string

Synopsis	Router name or VPRN service name
Context	configure system time ntp server (ipv4-address-no-zone ipv6-address-no-zone keyword) router-instance string
Tree	server
Notes	This element is part of a list key.

Introduced	25.3.R2
Platforms	7705 SAR Gen 2

authentication-keychain *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.</p>
Reference	configure system security keychains keychain <i>named-item</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

key-id *reference*

Synopsis	Authentication key and type used by the node
Context	configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance <i>string</i> key-id <i>reference</i>
Tree	key-id
Reference	configure system time ntp authentication-key <i>number</i>
Notes	The following elements are part of a choice: authentication-keychain or key-id .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer *boolean*

Synopsis	Set NTP server as preferred to receive time
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Context	configure system time ntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>keyword</i>) router-instance <i>string</i> prefer <i>boolean</i>
Tree	prefer
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version number

Synopsis	NTP version number generated by the node
Context	configure system time ntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>keyword</i>) router-instance <i>string</i> version <i>number</i>
Tree	version
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer-local-time boolean

Synopsis	Use local time over UTC time in the system
Context	configure system time prefer-local-time <i>boolean</i>
Tree	prefer-local-time
Description	<p>When configured to true, the system uses local time. This preference is applied to objects such as log file names, created and completed times reported in log files, NETCONF and gRPC date-and-time leafs, and rollback times displayed in show command outputs.</p> <p>When configured to false, the system uses UTC time.</p> <p>Note: The timezone used for show command outputs during a CLI session can be controlled using the environment time-display command.</p> <p>Note: The format used for the date-time strings may change, depending on the command setting. For example, when this command is set to true, all date-time strings include a suffix of three to five characters that indicates the timezone used.</p> <p>Note: The time format for timestamps on log events is controlled on a per-log basis, using the configure log log-id time-format command.</p>

Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sntp

Synopsis	Enter the sntp context
Context	configure system time sntp
Tree	sntp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of SNTP
Context	configure system time sntp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

server [[ip-address](#)] *ipv4-address*

Synopsis	Enter the server list instance
Context	configure system time sntp server <i>ipv4-address</i>
Tree	server
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] *ipv4-address*

Synopsis	IP address of the SNTP server
Context	configure system time sntp server <i>ipv4-address</i>
Tree	server

String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

interval *number*

Synopsis	Frequency of querying the server
Context	configure system time ntp server ipv4-address interval <i>number</i>
Tree	interval
Range	64 to 1024
Units	seconds
Default	64
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefer *boolean*

Synopsis	Preference value for this SNTP server
Context	configure system time ntp server ipv4-address prefer <i>boolean</i>
Tree	prefer
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

version *number*

Synopsis	SNTP version supported by this server
Context	configure system time ntp server ipv4-address version <i>number</i>
Tree	version
Range	1 to 3
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

sntp-state *keyword*

Synopsis	Mode for Simple Network Time Protocol (SNTP)
Context	configure system time sntp sntp-state <i>keyword</i>
Tree	sntp-state
Options	unicast, broadcast
Default	unicast
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

zone

Synopsis	Enter the zone context
Context	configure system time zone
Tree	zone
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

non-standard

Synopsis	Enter the non-standard context
Context	configure system time zone non-standard
Tree	non-standard
Notes	The following elements are part of a choice: non-standard or standard .
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

name *string*

Synopsis	Non-standard time zone name
Context	configure system time zone non-standard name <i>string</i>
Tree	name
String length	1 to 5
String format	'name' must contain only lowercase letters and digits (e.g. utc5)
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

offset *hours-minutes-with-range*

Synopsis Offset from UTC

Context **configure** [system time zone non-standard offset](#) *hours-minutes-with-range*

Tree [offset](#)

String length 5 to 6

String format 'hours-minutes-with-range' must be hh:mm; hours -11 to 12, minutes 00-59, and if the hour is 12, the minutes must be 00 (max value 12:00)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

standard

Synopsis Enter the **standard** context

Context **configure** [system time zone standard](#)

Tree [standard](#)

Notes The following elements are part of a choice: **non-standard** or **standard**.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

name *keyword*

Synopsis Standard time zone name

Context **configure** [system time zone standard name](#) *keyword*

Tree [name](#)

Options hst, akst, pst, mst, cst, est, ast, nst, utc, gmt, wet, cet, eet, msk, msd, awst, acst, aest, nzst

Default utc

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

transmission-profile [[name](#)] *named-item*

Synopsis Enter the **transmission-profile** list instance

Context	configure system transmission-profile <i>named-item</i>
Tree	transmission-profile
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[name] *named-item*

Synopsis	File transmission profile name
Context	configure system transmission-profile <i>named-item</i>
Tree	transmission-profile
String length	1 to 32
String format	'string-not-all-spaces' must contain at least one non-space character
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

http-version *keyword*

Synopsis	HTTP version
Context	configure system transmission-profile <i>named-item</i> http-version <i>keyword</i>
Tree	http-version
Options	1.0, 1.1
Default	1.1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv4-source-address *ipv4-unicast-address*

Synopsis	IPv4 source address used for the transport protocol
Context	configure system transmission-profile <i>named-item</i> ipv4-source-address <i>ipv4-unicast-address</i>
Tree	ipv4-source-address
String format	'ipv4-address' must use only digits and dots (no %zone) 'ipv4-address' must be a.b.c.d with each octet 0-255 (no zone-id)
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

ipv6-source-address *ipv6-address*

Synopsis IPv6 source address used for the transport protocol

Context **configure** [system](#) [transmission-profile](#) *named-item* [ipv6-source-address](#) *ipv6-address*

Tree [ipv6-source-address](#)

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

redirection *number*

Synopsis Maximum level of redirection

Context **configure** [system](#) [transmission-profile](#) *named-item* [redirection](#) *number*

Tree [redirection](#)

Range 1 to 8

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

retry *number*

Synopsis Number of attempts to reconnecting to the server

Context **configure** [system](#) [transmission-profile](#) *named-item* [retry](#) *number*

Tree [retry](#)

Range 1 to 256

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

router-instance *router-instance-base-management-vprn-loose*

Synopsis Router instance used by the transport protocol

Context **configure** [system](#) [transmission-profile](#) *named-item* [router-instance](#) *router-instance-base-management-vprn-loose*

Tree [router-instance](#)

String length 1 to 64

Default	Base
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout for a response from the server
Context	configure system transmission-profile <i>named-item</i> timeout <i>number</i>
Tree	timeout
Range	1 to 3600
Units	seconds
Default	60
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

usb [[usb-cflash](#)] *keyword*

Synopsis	Enter the usb list instance
Context	configure system usb <i>keyword</i>
Tree	usb
Description	Commands in this context configure the operational state of the USB port.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[usb-cflash] *keyword*

Synopsis	Specifies the compact flash ID
Context	configure system usb <i>keyword</i>
Tree	usb
Options	cf2
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of the USB port
Context	configure <i>system usb keyword admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.30 test-oam commands

```

configure
- test-oam
  - apply-groups reference
  - apply-groups-exclude reference
  - icmp
    - ipv6
      - apply-groups reference
      - apply-groups-exclude reference
      - length-field boolean
      - maximum-original-datagram boolean
  - mpls
    - apply-groups reference
    - apply-groups-exclude reference
    - echo-request-downstream-map keyword
    - timestamp-format keyword
  - twamp
    - apply-groups reference
    - apply-groups-exclude reference
    - server
      - admin-state keyword
      - allow-ipv6-udp-checksum-zero boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - enforce-test-session-start-time boolean
      - inactivity-timeout number
      - max-connections number
      - max-sessions number
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - description description
        - max-connections number
        - max-sessions number
    - twamp-light
      - apply-groups reference
      - apply-groups-exclude reference
      - inactivity-timeout number

```

4.30.1 test-oam command descriptions

test-oam

Synopsis	Enter the test-oam context
Context	configure test-oam
Tree	test-oam
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

icmp

Synopsis	Enter the icmp context
Context	configure test-oam icmp
Tree	icmp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

ipv6

Synopsis	Enter the ipv6 context
Context	configure test-oam icmp ipv6
Tree	ipv6
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

length-field *boolean*

Synopsis	Use length field in ICMPv6 responses
Context	configure test-oam icmp ipv6 length-field boolean
Tree	length-field
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

maximum-original-datagram *boolean*

Synopsis	ICMPv6 traceroute responses with largest datagram
Context	configure test-oam icmp ipv6 maximum-original-datagram <i>boolean</i>
Tree	maximum-original-datagram
Description	When configured to true , this command enables the original datagram field of the ICMPv6 error message to be a maximum of 1232 bytes. When configured to false , the original datagram field of the ICMPv6 error message smaller than 1232 bytes be built smaller.
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

mpls

Synopsis	Enter the mpls context
Context	configure test-oam mpls
Tree	mpls
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

echo-request-downstream-map *keyword*

Synopsis	Format of the downstream mapping TLV
Context	configure test-oam mpls echo-request-downstream-map <i>keyword</i>
Tree	echo-request-downstream-map
Description	This command specifies the format of the downstream mapping TLV to use in all LSP trace packets and LDP tree trace packets originated on this node. The following downstream mapping TLVs are supported: the original Downstream Mapping (DSMAP) TLV, defined in RFC 4379 (obsoleted by RFC 8029) and the Downstream Detailed Mapping (DDMAP) TLV, defined in RFC 6424. See the "DDMAP TLV" section in the <i>7705 SAR Gen 2 OAM and Diagnostics Guide</i> for more information.
Options	dsmap – Downstream Mapping TLV ddmap – Downstream Detailed Mapping TLV
Default	dsmap
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

timestamp-format *keyword*

Synopsis Timestamp format for MPLS ping request and reply PDUs

Context **configure** [test-oam mpls timestamp-format](#) *keyword*

Tree [timestamp-format](#)

Options rfc4379 – 1900-based timestamp (standard)
unix – 1970-based timestamp

Default unix

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

twamp

Synopsis Enter the **twamp** context

Context **configure** [test-oam twamp](#)

Tree [twamp](#)

Description Commands in this context configure the TWAMP functionality.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

server

Synopsis Enter the **server** context

Context **configure** [test-oam twamp server](#)

Tree [server](#)

Description Commands in this context configure the node for TWAMP server functionality.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

admin-state *keyword*

Synopsis Administrative state of the TWAMP server

Context **configure** [test-oam twamp server admin-state](#) *keyword*

Tree	admin-state
Options	enable, disable
Default	disable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-ipv6-udp-checksum-zero *boolean*

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure test-oam twamp server allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, the router accepts IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to false, the router discards packets that arrive with an IPv6 UDP checksum of 0x0000.</p>
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

enforce-test-session-start-time *boolean*

Synopsis	Discard TWAMP packets before test-session start time
Context	configure test-oam twamp server enforce-test-session-start-time <i>boolean</i>
Tree	enforce-test-session-start-time
Description	<p>When configured to true, the router checks the signalled test-session start time against the server time and discards TWAMP test packets that arrive before the negotiated test-session start time.</p> <p>When configured to false, the router processes all TWAMP test packets without checking the test-session start time against the server time.</p>
Default	true
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inactivity-timeout *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Inactivity time-out for TWAMP control connections
Context	configure test-oam twamp server inactivity-timeout <i>number</i>
Tree	inactivity-timeout
Description	This command configures the inactivity time-out for all TWAMP-control connections. If no TWAMP control message is exchanged over the TCP connection for this duration of time the connection is closed and all in-progress tests are terminated.
Range	60 to 3600
Units	seconds
Default	900
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-connections *number*

**WARNING:**
Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TWAMP server control connections limit
Context	configure test-oam twamp server max-connections <i>number</i>
Tree	max-connections
Description	This command configures the maximum number of TWAMP control connections from all TWAMP clients. The system rejects a new control connection if accepting it causes either this limit or a prefix limit (prefix max-connections) to be exceeded.
Range	0 to 64
Default	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sessions *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of concurrent TWAMP server test sessions
Context	configure test-oam twamp server max-sessions <i>number</i>
Tree	max-sessions
Description	This command configures the maximum number of concurrent TWAMP-Test sessions across all allowed clients. The system rejects a new test session (described by a Request-TW-Session message) if accepting it causes either the limit defined by this command or a prefix limit (prefix max-sessions) to be exceeded.
Range	0 to 128
Default	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Description	Commands in this context configure an IP address prefix containing one or more TWAMP clients. For a TWAMP client to connect to the TWAMP server (and subsequently conduct tests) it must establish the control connection using an IP address that is part of a configured prefix.
Max. instances	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix to match against TWAMP client address
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix

Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>description</i>
Tree	description
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-connections *number*

Synopsis	Maximum number of control connections for TWAMP prefix
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) max-connections <i>number</i>
Tree	max-connections
Description	This command configures the maximum number of control connections by clients with an IP address in a specific prefix. The system rejects a new control connection if accepting it causes either the prefix limit defined by this command or the server limit (server max-connections) to be exceeded.
Range	0 to 64
Default	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

max-sessions *number*

Synopsis	Maximum concurrent TWAMP test sessions based on prefix
Context	configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) max-sessions <i>number</i>
Tree	max-sessions
Description	This command configures the maximum number of concurrent TWAMP-Test sessions by clients with an IP address in a specific prefix. The system rejects a new test session

(described by a Request-TW-Session message) if accepting it causes either the limit defined by this command or the server limit (**server max-sessions**) to be exceeded.

Range	0 to 128
Default	32
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

twamp-light

Synopsis	Enter the twamp-light context
Context	configure test-oam twamp twamp-light
Tree	twamp-light
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

inactivity-timeout *number*

Synopsis	Time to maintain stale state on the session reflector
Context	configure test-oam twamp twamp-light inactivity-timeout <i>number</i>
Tree	inactivity-timeout
Range	10 to 100
Units	seconds
Default	100
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

4.31 vrrp commands

```

configure
- vrrp
- apply-groups reference
- apply-groups-exclude reference
- policy number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- context service-name
- delta-in-use-limit number
- description description
- priority-event
- host-unreachable (ipv4-address-with-zone | ipv6-address-with-zone)
- apply-groups reference
- apply-groups-exclude reference
- drop-count number
- hold-clear number
- hold-set number
- padding-size number
- priority
- event-type keyword
- priority-level number
- request-interval number
- timeout number
- lag-port-down lag-interface
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- number-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- weight-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- mc-ipsec-non-forwarding number
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- port-down port-named
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- route-unknown (ipv4-prefix | ipv6-prefix)
- apply-groups reference

```

configure vrrp policy priority-event route-unknown apply-groups-exclude

- **apply-groups-exclude** *reference*
- **hold-clear** *number*
- **hold-set** *number*
- **less-specific**
 - **allow-default** *boolean*
- **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
- **priority**
 - **event-type** *keyword*
 - **priority-level** *number*
- **protocol** *keyword*

4.31.1 vrrp command descriptions

vrrp

Synopsis	Enter the vrrp context
Context	configure vrrp
Tree	vrrp
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

policy [[policy-id](#)] *number*

Synopsis	Enter the policy list instance
Context	configure vrrp policy <i>number</i>
Tree	policy
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[policy-id] *number*

Synopsis	Policy ID
Context	configure vrrp policy <i>number</i>
Tree	policy
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

admin-state *keyword*

Synopsis	Administrative state of VRRP priority control policy
Context	configure vrrp policy <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Default	enable
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

context *service-name*



WARNING:
Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service name to which this policy applies
Context	configure <i>vrp policy number context service-name</i>
Tree	<i>context</i>
String length	1 to 64
String format	'service-name' must contain at least one non-space character
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

delta-in-use-limit *number*

Synopsis	Limit on the delta priority control events
Context	configure <i>vrp policy number delta-in-use-limit number</i>
Tree	<i>delta-in-use-limit</i>
Range	1 to 254
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

description *description*

Synopsis	Text description
Context	configure <i>vrp policy number description description</i>
Tree	<i>description</i>
String length	1 to 80
String format	'string-not-all-spaces' must contain at least one non-space character
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

priority-event

Synopsis Enter the **priority-event** context

Context **configure** *vrrp policy number* **priority-event**

Tree **priority-event**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

host-unreachable [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **host-unreachable** list instance

Context **configure** *vrrp policy number* **priority-event** **host-unreachable** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree **host-unreachable**

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

[*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Host IP address that receives a constant ping probe

Context **configure** *vrrp policy number* **priority-event** **host-unreachable** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree **host-unreachable**

Description This command configures the host IP address for which the specific host unreachable priority event monitors connectivity with a continuous ICMP echo request (ping) probe.

String format 'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id
'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id

Notes This element is part of a list key.

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

drop-count *number*

Synopsis Threshold for consecutive message send attempts

Context	configure <i>vrrp policy number priority-event host-unreachable</i> (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) <i>drop-count number</i>
Tree	<i>drop-count</i>
Range	1 to 60
Default	3
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure <i>vrrp policy number priority-event host-unreachable</i> (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) <i>hold-clear number</i>
Tree	<i>hold-clear</i>
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	configure <i>vrrp policy number priority-event host-unreachable</i> (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) <i>hold-set number</i>
Tree	<i>hold-set</i>
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

padding-size *number*

Synopsis	Packet length padding of the ICMP packet
Context	configure <i>vrrp policy number priority-event host-unreachable</i> (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) <i>padding-size number</i>
Tree	<i>padding-size</i>

Range	0 to 16384
Units	bytes
Default	56
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority

Synopsis	Enter the priority context
Context	configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) priority
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) priority event-type <i>keyword</i>
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) priority priority-level <i>number</i>
Tree	priority-level
Range	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

request-interval *number*

Synopsis	Time interval between consecutive ICMP echo requests
Context	configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) request-interval <i>number</i>
Tree	request-interval
Range	1 to 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

timeout *number*

Synopsis	Timeout for ICMP echo request messages
Context	configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) timeout <i>number</i>
Tree	timeout
Range	1 to 60
Units	seconds
Default	1
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

lag-port-down [**lag-name**] *lag-interface*

Synopsis	Enter the lag-port-down list instance
Context	configure vrrp policy <i>number</i> priority-event lag-port-down <i>lag-interface</i>
Tree	lag-port-down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-name] *lag-interface*

Synopsis	LAG name
----------	----------

Context	configure vrrp policy <i>number</i> priority-event lag-port-down lag-interface
Tree	lag-port-down
String length	1 to 27
String format	'lag-interface' must be lag- followed by number 1-800 or up to 23 chars (e.g. lag-1 or lag-my-lag)
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure vrrp policy <i>number</i> priority-event lag-port-down lag-interface hold-clear <i>number</i>
Tree	hold-clear
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	configure vrrp policy <i>number</i> priority-event lag-port-down lag-interface hold-set <i>number</i>
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

number-down [[number-of-lag-ports-down](#)] *number*

Synopsis	Enter the number-down list instance
Context	configure vrrp policy <i>number</i> priority-event lag-port-down lag-interface number-down <i>number</i>
Tree	number-down

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

[number-of-lag-ports-down] *number*

Synopsis Threshold of down LAG ports that create a set event
Context **configure** [vrrp policy number](#) [priority-event lag-port-down](#) [lag-interface number-down number](#)
Tree [number-down](#)
Range 1 to 64
Notes This element is part of a list key.
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority

Synopsis Enter the **priority** context
Context **configure** [vrrp policy number](#) [priority-event lag-port-down](#) [lag-interface number-down number](#) [priority](#)
Tree [priority](#)
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

event-type *keyword*

Synopsis Effect of priority-level value on base priority value
Context **configure** [vrrp policy number](#) [priority-event lag-port-down](#) [lag-interface number-down number](#) [priority](#) [event-type keyword](#)
Tree [event-type](#)
Options delta, explicit
Default delta
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure <i>vrrp policy number priority-event lag-port-down lag-interface number-down number priority priority-level number</i>
Tree	<i>priority-level</i>
Range	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

weight-down [*lag-ports-down-weight*] *number*

Synopsis	Enter the weight-down list instance
Context	configure <i>vrrp policy number priority-event lag-port-down lag-interface weight-down number</i>
Tree	<i>weight-down</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[lag-ports-down-weight] *number*

Synopsis	LAG name for the reduced LAG ports
Context	configure <i>vrrp policy number priority-event lag-port-down lag-interface weight-down number</i>
Tree	<i>weight-down</i>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority

Synopsis	Enter the priority context
Context	configure <i>vrrp policy number priority-event lag-port-down lag-interface weight-down number priority</i>
Tree	<i>priority</i>

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

event-type *keyword*

Synopsis Effect of priority-level value on base priority value
Context **configure** [vrrp policy number](#) [priority-event lag-port-down lag-interface weight-down number](#) [priority event-type keyword](#)
Tree [event-type](#)
Options delta, explicit
Default delta
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority-level *number*

Synopsis Priority level associated with this event
Context **configure** [vrrp policy number](#) [priority-event lag-port-down lag-interface weight-down number](#) [priority priority-level number](#)
Tree [priority-level](#)
Range 1 to 254
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

mc-ipsec-non-forwarding [[tunnel-group-id](#)] *number*

Synopsis Enter the **mc-ipsec-non-forwarding** list instance
Context **configure** [vrrp policy number](#) [priority-event mc-ipsec-non-forwarding number](#)
Tree [mc-ipsec-non-forwarding](#)
Introduced 25.3.R2
Platforms 7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

[tunnel-group-id] *number*

Synopsis IPSEC tunnel group monitored by priority control event
Context **configure** [vrrp policy number](#) [priority-event mc-ipsec-non-forwarding number](#)

Tree	mc-ipsec-non-forwarding
Range	1 to 64
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> hold-clear <i>number</i>
Tree	hold-clear
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> hold-set <i>number</i>
Tree	hold-set
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

priority

Synopsis	Enter the priority context
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> priority
Tree	priority
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

event-type *keyword*

Synopsis	Event type
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> priority event-type <i>keyword</i>
Tree	event-type
Options	delta, explicit
Default	delta
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> priority priority-level <i>number</i>
Tree	priority-level
Range	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR-Hx, 7705 SAR-Mx, 7705 SAR-1

port-down [[port-id](#)] *port-named*

Synopsis	Enter the port-down list instance
Context	configure vrrp policy <i>number</i> priority-event port-down <i>port-named</i>
Tree	port-down
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[port-id] *port-named*

Synopsis	Port ID for the reduced LAG ports
Context	configure vrrp policy <i>number</i> priority-event port-down <i>port-named</i>
Tree	port-down
Notes	This element is part of a list key.

Introduced 25.3.R2
Platforms 7705 SAR Gen 2

hold-clear *number*

Synopsis Delay time for a cleared event on the router instance
Context **configure** *vrrp policy number priority-event port-down port-named hold-clear number*
Tree *hold-clear*
Range 1 to 86400
Units seconds
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

hold-set *number*

Synopsis Hold time before transitioning to cleared state
Context **configure** *vrrp policy number priority-event port-down port-named hold-set number*
Tree *hold-set*
Range 1 to 86400
Units seconds
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

priority

Synopsis Enter the **priority** context
Context **configure** *vrrp policy number priority-event port-down port-named priority*
Tree *priority*
Introduced 25.3.R2
Platforms 7705 SAR Gen 2

event-type *keyword*

Synopsis Effect of priority-level value on base priority value
Context **configure** *vrrp policy number priority-event port-down port-named priority event-type keyword*

Tree	event-type
Options	delta, explicit
Default	delta
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority-level *number*

Synopsis	Priority level associated with this event
Context	configure vrrp policy <i>number</i> priority-event port-down <i>port-named</i> priority priority-level <i>number</i>
Tree	priority-level
Range	1 to 254
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

route-unknown [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the route-unknown list instance
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	route-unknown
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix of route monitored by priority control event
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	route-unknown
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-clear *number*

Synopsis	Delay time for a cleared event on the router instance
Context	configure <i>vrrp policy number priority-event route-unknown</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>hold-clear number</i>
Tree	<i>hold-clear</i>
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

hold-set *number*

Synopsis	Hold time before transitioning to cleared state
Context	configure <i>vrrp policy number priority-event route-unknown</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>hold-set number</i>
Tree	<i>hold-set</i>
Range	1 to 86400
Units	seconds
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

less-specific

Synopsis	Enable the less-specific context
Context	configure <i>vrrp policy number priority-event route-unknown</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>less-specific</i>
Tree	<i>less-specific</i>
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

allow-default *boolean*

Synopsis	Match on default route
Context	configure <i>vrrp policy number priority-event route-unknown</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) <i>less-specific allow-default boolean</i>

Tree	allow-default
Default	false
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

next-hop [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Add a list entry for next-hop
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Next-hop IP address for a returned route prefix
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Description	This command configures the next-hop IP address used to match the route prefix being monitored by the priority control event with the results of a route table lookup.
String format	'ipv4-address-with-zone' must be a.b.c.d with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id 'ipv6-address-with-zone' must be valid IPv6 with optional %zone-id
Notes	This element is part of a list key.
Introduced	25.3.R2
Platforms	7705 SAR Gen 2

priority

Synopsis	Enter the priority context
Context	configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) priority
Tree	priority
Introduced	25.3.R2

Platforms 7705 SAR Gen 2

event-type *keyword*

Synopsis Effect of priority-level value on base priority value

Context **configure** **vrrp policy** *number* **priority-event** **route-unknown** (*ipv4-prefix* | *ipv6-prefix*) **priority event-type** *keyword*

Tree **event-type**

Options delta, explicit

Default delta

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

priority-level *number*

Synopsis Priority level associated with this event

Context **configure** **vrrp policy** *number* **priority-event** **route-unknown** (*ipv4-prefix* | *ipv6-prefix*) **priority priority-level** *number*

Tree **priority-level**

Range 1 to 254

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

protocol *keyword*

Synopsis Routing protocol as match criterion

Context **configure** **vrrp policy** *number* **priority-event** **route-unknown** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword*

Tree **protocol**

Options bgp, ospf, isis, rip, static, bgp-vpn

Max. instances 6

Introduced 25.3.R2

Platforms 7705 SAR Gen 2

5 Deprecated and obsolete commands

This section lists the deprecated and obsolete commands in this major release.

5.1 Deprecated commands

This chapter provides a list of commands that are marked as “status deprecated” in the Nokia YANG models and the MD-CLI and should no longer be used. Only releases in which commands are initially deprecated are included in this section. If applicable, the equivalent configuration groups command is also deprecated (but not explicitly listed).

See the SR OS Software Release Notes for more information.

5.1.1 26.10.R1

service commands:

- configure service vpn mvpn auto-discovery source-address

5.2 Obsolete commands

This chapter provides a list of commands that are marked as “status obsolete” in the Nokia YANG models and the MD-CLI. These commands can no longer be used and are considered invalid. Only releases in which commands are initially obsoleted are included in this section. If applicable, the equivalent configuration groups command is also obsoleted (but not explicitly listed).

See the SR OS Software Release Notes for more information.

5.2.1 26.3.R1

filter commands:

- configure filter ip-filter embed openflow
- configure filter ip-filter embed openflow admin-state
- configure filter ip-filter embed openflow apply-groups
- configure filter ip-filter embed openflow grt
- configure filter ip-filter embed openflow of-switch
- configure filter ip-filter embed openflow offset
- configure filter ip-filter embed openflow sap
- configure filter ip-filter embed openflow system
- configure filter ip-filter embed openflow vpls
- configure filter ip-filter embed openflow vprn
- configure filter ip-filter entry action forward esi-l2
- configure filter ip-filter entry action forward esi-l2 esi-value
- configure filter ip-filter entry action forward esi-l2 vpls
- configure filter ip-filter entry action forward esi-l3
- configure filter ip-filter entry action forward esi-l3 esi-value
- configure filter ip-filter entry action forward esi-l3 sf-ip
- configure filter ip-filter entry action forward esi-l3 vas-interface
- configure filter ip-filter entry action forward esi-l3 vprn
- configure filter ipv6-filter embed openflow
- configure filter ipv6-filter embed openflow admin-state
- configure filter ipv6-filter embed openflow apply-groups
- configure filter ipv6-filter embed openflow grt
- configure filter ipv6-filter embed openflow of-switch
- configure filter ipv6-filter embed openflow offset
- configure filter ipv6-filter embed openflow sap
- configure filter ipv6-filter embed openflow system

- configure filter ipv6-filter embed openflow vpls
- configure filter ipv6-filter embed openflow vprn
- configure filter ipv6-filter entry action forward esi-l2
- configure filter ipv6-filter entry action forward esi-l2 esi-value
- configure filter ipv6-filter entry action forward esi-l2 vpls
- configure filter ipv6-filter entry action forward esi-l3
- configure filter ipv6-filter entry action forward esi-l3 esi-value
- configure filter ipv6-filter entry action forward esi-l3 sf-ip
- configure filter ipv6-filter entry action forward esi-l3 vas-interface
- configure filter ipv6-filter entry action forward esi-l3 vprn
- configure filter mac-filter entry action forward esi-l2
- configure filter mac-filter entry action forward esi-l2 esi-value
- configure filter mac-filter entry action forward esi-l2 vpls

macsec commands:

- configure macsec connectivity-association static-cak mka-hello-interval
- configure macsec connectivity-association static-cak mka-key-server-priority

router commands:

- configure router interface gre-termination
- configure router nat outside dnat-only
- configure router nat outside dnat-only route-limit

service commands:

- configure service vprn nat outside dnat-only
- configure service vprn nat outside dnat-only route-limit

system commands:

- configure system bluetooth
- configure system bluetooth admin-state
- configure system bluetooth advertising-timeout
- configure system bluetooth apply-groups
- configure system bluetooth device
- configure system bluetooth device apply-groups
- configure system bluetooth device description
- configure system bluetooth device mac-address
- configure system bluetooth module
- configure system bluetooth module apply-groups
- configure system bluetooth module cpm-slot
- configure system bluetooth module provisioned-identifier

- configure system bluetooth pairing-button
- configure system bluetooth passkey
- configure system bluetooth power-mode
- configure system grpc md-cli
- configure system grpc md-cli admin-state
- configure system management-interface remote-management
- configure system management-interface remote-management admin-state
- configure system management-interface remote-management allow-unsecure-connection
- configure system management-interface remote-management apply-groups
- configure system management-interface remote-management apply-groups-exclude
- configure system management-interface remote-management client-tls-profile
- configure system management-interface remote-management connection-timeout
- configure system management-interface remote-management delay-on-boot
- configure system management-interface remote-management device-label
- configure system management-interface remote-management device-name
- configure system management-interface remote-management hello-interval
- configure system management-interface remote-management manager
- configure system management-interface remote-management manager admin-state
- configure system management-interface remote-management manager allow-unsecure-connection
- configure system management-interface remote-management manager apply-groups
- configure system management-interface remote-management manager apply-groups-exclude
- configure system management-interface remote-management manager client-tls-profile
- configure system management-interface remote-management manager connection-timeout
- configure system management-interface remote-management manager description
- configure system management-interface remote-management manager device-label
- configure system management-interface remote-management manager device-name
- configure system management-interface remote-management manager manager-address
- configure system management-interface remote-management manager manager-name
- configure system management-interface remote-management manager manager-port
- configure system management-interface remote-management manager router-instance
- configure system management-interface remote-management manager source-address
- configure system management-interface remote-management manager source-port
- configure system management-interface remote-management router-instance
- configure system management-interface remote-management source-address
- configure system management-interface remote-management source-port
- configure system security aaa local-profiles profile grpc rpc-authorization md-cli-session

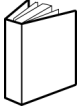
- configure system security aaa user-template access bluetooth
- configure system security user-params local-user user access bluetooth

5.2.2 26.10.R1

mirror commands:

- configure mirror mirror-dest pcap file-url

Customer document and product support



Customer documentation

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Technical support

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